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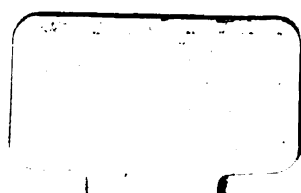
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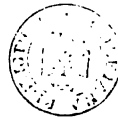
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REPORT
OF THE
SANITARY COMMISSIONER
FOR
MADRAS,
1873.

WITH
APPENDICES



CONTAINING
AN INQUIRY REGARDING THE ALLEGED IMPROVEMENT IN THE
VALUE, FOR ASSURANCE PURPOSES, OF
EUROPEAN LIFE IN INDIA, BY W. R. CORNISH, SURGEON-MAJOR, F.R.C.S.,
SANITARY COMMISSIONER FOR MADRAS,
REPORTS ON CHOLERA IN HER MAJESTY'S 45TH REGIMENT AND
F BATTERY, 20TH BRIGADE, R.A., THAYETMYO,
BY DRS. HUNGERFORD AND ROBERTSON,
STATISTICAL TABLES OF SICKNESS AND MORTALITY AMONG
EUROPEAN AND NATIVE TROOPS, AND
VITAL STATISTICS OF THE GENERAL POPULATION.



MADRAS:
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REPORT

OF THE

SANITARY COMMISSIONER FOR MADRAS

FOR

1873.

PART I.

MILITARY.

SECTION I.

SICKNESS AND MORTALITY AMONG BRITISH TROOPS.

THE number of men of the British Army in the Madras Presidency on the 1st January 1873 was 12,273, and on the 31st December 1873 there remained 12,172, or 101 less than in the beginning of the year. The mean strength of the troops during the year was 12,222.

2. In the period under review the army recruited 41 men in India, and received drafts from England of 1,177 men, and 245 from corps in other Presidencies ; 7 men joined after desertion, so that the total increase was 1,470.

3. The losses of the army during the same period amounted to 1,571 men, and are thus specified in the Adjutant-General's return :—

Time-expired or pensioned	...	...	...	...	76
Invalided...	...	...	...	...	414
Discharged by purchase...	...	...	...	...	13
Do. by Court-martial	...	...	...	...	7
Do. otherwise	...	...	...	...	41
Deserted ...	...	...	...	...	32
Transferred to corps in other Presidencies	...	...	...	...	84
Do. to Unattached List	...	...	...	...	10
Embarked for England	...	...	...	...	683
Died	...	...	...	...	211

Total ... 1,571

In the beginning of 1873 H. M.'s 10th Regiment left Rangoon for England. No regiment arrived in the Presidency during this period, but two batteries of Royal Artillery arrived in February.

4. The number of Europeans of the old Indian forces stood at 9 in the beginning of 1873, and at 10 on the 1st January 1874.

5. The mean strength of the European forces actually present at the several stations, calculated from the weekly returns, and including the establishment of Veterans, who are not shown in the return of the British effective troops, was 11,418. This strength is below that shown in the strength of the British army, but the explanation of difference is that, at the end of the year, some corps and batteries of Artillery were in movement to join the Camp of Exercise at Bangalore, and will be included under the head of troops marching.

6. The total hospital admissions were 14,339, and deaths 206. There were 670 men on the average in hospital every day during the year.

Besides the mortality recorded at the various stations of the Madras army, 10 men died in marching, or before the invalids had left the Bombay Presidency.* The total deaths, therefore, of the European troops of the Presidency was 216.

7. The proportions of sickness, mortality, and invaliding for the last 16 years are shown below. It will be observed that the sick and death rates for 1873 have been on the whole favorable, and that there has been a perceptible reduction in mortality.

—	Years.	Strength.	Ratio per Mille of Strength.						
			Admissions.	Deaths			Invalided		
				In Hospital	Out of Hospital.	Total.	For Discharge.	For Change of Climate.	Total.
Inspector-General's Returns, Indian Medical Department.	1858-59	15,482	1880·8	42·3	6·4	48·7	...	...	...
	1859-60	16,921	1028·01	15·9	2·5	18·4	...	...	...
	1860	10,741	1699·4	19·1	2·04	21·2	8·1	49·6	57·7
	1861	15,051	1361·7	14·5	1·8	16·5	13·3	22·2	35·5
	1862	13,920	1291·1	17·09	1·7	18·8	9·5	18·7	28·3
	1863	12,586	1232·4	16·5	3·01	19·5	11·5	28·5	40·09
	1864	13,280	1521·08	16·5	3·6	20·1	14·0	51·03	65·03
	1865	13,623	1426·4	19·5	2·9	22·5	4·9	33·9	38·8
	1866	11,498	1460·6	20·2	1·5	21·7	10·5	46·1	56·6
	1867	10,928	1358·2	15·7	2·3	18·1	10·5	44·1	54·6
Stational Returns...	1868	9,934	1388·3	16·3	3·0	19·3	9·5	52·8	62·4
	1869	10,880	1258·6	21·0	2·3	23·4	8·2	47·4	55·7
	1870	11,035	1436·2	16·9	2·3	19·2	6·6	70·4	77·05
	1871	10,802	1183·2	18·7	2·1	20·8	12·5	29·7	42·3
	1872	11,303	1344·5	16·6	3·1	19·8	11·2	26·5	37·8
	1873	11,418	1255·8	15·5	2·5	18·0	13·1	49·6	62·7

8. The past year has been on the whole a healthy season in Southern India. The abnormal and excessive rainfall of 1872 seems to have influenced the production of malarious fevers amongst the native population; but with the well-housed and well-clothed European soldier there has been no particular manifestation of fevers of the paroxysmal type. Small-pox has been very widely diffused throughout the country, but there were only six cases and one death from this cause in the European army, which is on the whole excellently protected by vaccination. Epidemic cholera had happily quite disappeared from the peninsula of India throughout the year, but on the opposite coast of Burmah it seems to have been severe, and in the province of Burmah only, did the Madras troops suffer from this disease. In the stations of Thayetmyo and Tonghoo there were 23 cases and 12 deaths, and a Commissioned Officer died of the malady in Rangoon. There were also two casualties out of hospital from cholera in Burmah. I have not before me sufficient information to trace

* One other death occurred out of the Madras Command, at Dum-Dum, from hepatitis.

the progress of the epidemic in Burmah, but its course was manifestly in a southern direction, and late reports show that the disease has advanced to Siam, Cochin-China, Singapore, and Sumatra. The great freedom of Southern India from this pest is sufficiently manifest, when it is mentioned that in collecting the troops for the Camp of Exercise near Bangalore not a single case was heard of in any of the villages or districts through which the troops passed.

9. The curious epidemic of dengue fever, which added so much to the sick list of the European troops in 1872, re-appeared in Saint Thomas' Mount, Trichinopoly, Bangalore, and Rangoon, and extended its ravages to Kamptee and Seetabuldee in the Central Provinces. There were in all 311 admissions from this disease in seven stations. It had disappeared by the end of the year.

Dengue.
10. Enteric fever appears to have been less prevalent than usual. There are recorded 51 cases and 10 deaths. More than one-half of these cases occurred at Cannanore in H. M.'s 43rd Regiment, composed chiefly of recruits, and only a few months resident in India. Some cases occurred also in H. M.'s 67th at Rangoon, a regiment newly arrived from Home. At Bangalore there were 9 cases altogether in the Artillery and Hussars, and at Wellington (the hill sanitarium) the disease appears to have been introduced by a body of convalescents and weakly recruits from Cannanore. In three other stations, *i.e.*, Secunderabad, Thayetmyo, and Tonghoo, there occurred isolated cases of the disease.

11. The outbreak of typhoid fever at Cannanore formed the subject of a special investigation on the part of Dr. Massy, Deputy Surgeon-General, Mysore Division, and myself, in consultation. We could not find any positive evidence to enable us to say conclusively that local insanitary conditions had anything to do with the outbreak. The barracks and surroundings were not perfect, and suggestions were made for the remedying of the more obvious of the sanitary defects observable, which were approved by the military authorities, and are in course of execution. And, as regards importation, there were no facts to show that the disease had arisen in this way. The evidence of the medical officers of the regiment showed that there had been no typhoid at the station last occupied by the troops in Ireland; but, as raw recruits had joined in large numbers a few days prior to embarkation, of whose history nothing was known, there was a faint probability that the germs of the epidemic might have been conveyed to this country in the clothing of the recruits; but on this point nothing definite could be ascertained.

12. It was shown in the case of the 67th Regiment coming to Burmah that the germinal matter of diphtheria may be brought to this country by a body of troops; and, if diphtheria can be so conveyed, there is nothing improbable in the supposition that typhoid fever may occasionally be introduced in like manner. It is important to bear in view that regiments of young men are prone to suffer from this disease immediately on, or shortly after, arrival in India; and that whatever the causes of the malady may be, the liability to it appears to decrease when the constitutions of the men have undergone the process of seasoning, which we term acclimatization.

13. As regards the Cannanore outbreak of enteric fever, we could not say

dysentery and hepatic diseases, while violent deaths (principally accidental drowning and suicide) have been higher than usual. While there is some evi-

Heart diseases.

dence indicating improvement in regard to malarious and other diseases incidental to tropical service, it is unsatisfactory to note how common are diseases of the great blood-vessels and heart; and how constantly these affections add to the mortality bills and invaliding of the army. In the past year no fewer than 20 men died of aneurism of the large blood-vessels, and 6 of organic disease of the heart, while 51 were invalided for change of climate, and 23 for discharge, owing to functional or organic disease of the circulatory organs.

What the special circumstances of a soldier's life may be that tend to the production of this form of disease is a subject that might well occupy the attention of regimental medical officers who have the means of observation at hand.

19. Dysentery again is still a very common, and often fatal, disease amongst European soldiers. In former times the mortality from this

Dysentery.

disease averaged about seven per cent. of the cases treated; but, after the general adoption of the use of large doses of ipecacuanha and opium, as recommended by the late Surgeon Docker in 1858, the mortality suddenly fell from seven to two per cent. But of late years the proportion of recoveries from dysentery has been less than was the case ten or twelve years ago, and it becomes a question of some interest to consider whether this is the result of a change in medical practice, or of a change of type of the disease. In 1873 there were 32 deaths in 1,038 cases treated, that is, the mortality was rather more than *three* per cent. The disease was more prevalent at Secunderabad than in any other station, and more than one-half of the deaths occurred in the Hyderabad Subsidiary Force.

The regimental surgeons who adopted the ipecacuanha treatment of dysentery in 1859, and who almost unanimously testified to the marvellous power of the remedy in their hands, have passed away from India, and with a constant succession of officials new to the country, seeing a class of diseases with which they are unfamiliar, there is always the danger that the traditions and experience of the past may be forgotten, or ignored in favor of newer suggestions. I have no means of knowing whether the ipecacuanha treatment of dysentery is still practised so freely as it was twelve years ago; but, in regard to the apparently increasing mortality from the disease, I think it would be well if the subject were duly investigated.

20. Hepatic affections amongst the troops of this Presidency do not appear to be diminishing either in number or fatality. During the

Hepatic affections.

year there were 54 deaths from diseases of the liver, the most of them being from abscess. Why men of soldiers' ages, and frequently of short periods of service, should be so liable to suffer from liver abscess is not at all clear. Causes which favor dysentery seem also to favor abscess of the liver, and the latter disease is not unfrequently the sequel of repeated ulcerations of the lower bowel. The prompt and early treatment of dysentery, therefore, appears, so far as we can see at present, to be the most certain means of diminishing the losses of the army by hepatic abscess. In making this remark, I do not mean to imply that there are not forms of hepatic disease unconnected with dysentery,

Return showing Sickness and Mortality among European Troops marching during 1873.

Regiments.	From	To	No. of Days in Movement.	Strength.			Sickness and Mortality.								
				Officers.	Men.	Women.	Children.	Officers.		Men.		Women.		Children.	
								A.	D.	A.	D.	A.	D.	A.	D.
45th Regiment, Left Wing Detachment, 44th Regiment and R. A. Do. 67th Regiment Do. 48th do. Do. 43rd Light Infantry & Invalids. Convalescents, 74th Regiment Detachment, 1-21st Fusiliers Volunteers, H. M.'s 2-24th Regiment Do. 2-10th Regiment Detachment 4-5th Brigade R. A. G-20th Brigade R. A. C-9th do. C-20th do. A-9th do. B-C. do. Head-Quarters C-Brigade R. A. C-C. Brigade R. A. E-20th do. D-20th do. G-9th do. B-20 do. G-18th do. Details 1-21st Regiment Do. 16th Lancers Do. R. A., 18th Hussars, & 89th Regt. Do. British Troops and Invalids Time-expired men...	Tonghoo Puchmarree Port Blair and Rangoon. Wellington and Bellary Cananore, Beypore, Malapooram, &c. Arconum Madras Secunderabad Madras Tonghoo Bangalore Kamptee Secunderabad Saint Thomas' Mount Goolburgh Poona Bombay Bangalore Kamptee Secunderabad Trichinopoly Bellary Wellington Secunderabad Wellington Madras, Rangoon, Wellington, &c. Madras	Rangoon Kamptee Rangoon and Port Blair. Bellary and Wellington Wellington, Colatore, Calicut, &c. Wellington Palaveram Goolburgh Bangalore Rangoon Kamptee Bangalore Saint Thomas' Mount Secunderabad Do. Bangalore Do. Secunderabad Bangalore Do. Do. Do. Saint Thomas' Mount Davasaagoor Bangalore Rangoon, Wellington, Madras, &c. Goolburgh	19 7 26 9 28 3 1 16 6 13 43 38 11 10 15 5 6 54 46 21 31 22 1 15 1 1 ...	8 4 8 3 6 1 1 4 5 7 5 1 5 2 5 6 1 ... 1 ... 48 3 ...	394 145 207 120 524 56 84 181 20 4 117 122 126 21 238 147 49 127 129 128 123 119 43 8 27 1,522 40	57 ... 19 8 21 9 ... 16 22 7 16 4 7 2 ... 181 3	109 ... 29 18 23 14 ... 25 45 21 14 22 6 384 3	 1 1 ...							

a Abscess of liver

b Sunstroke

c Dysentery

d Cholera

e Hepatitis

f Unknown

g Asphyxia from drowning

h Convulsions

WOMEN.

27. The number of women coming under observation during the year as sickness and mortality among soldiers' wives of Non-commissioned Officers and Soldiers was 1,652; the number of hospital admissions was 1,716; the daily sick 61; and the total deaths during the year 23—2 of these having occurred out of hospital.

Comparison with former years.

28. The ratio of admissions and deaths for the past *five* years are shown below :—

—	1869.	1870.	1871.	1872.	1873.
Admissions per mille	1031·5	976·6	849·81	1116·82	1038·74
Deaths per mille in hospital	25·2	19·5	16·27	12·84	12·71
Deaths out of hospital	*	*	1·87	0·61	1·21

It will be observed that the results of the past year have been on the whole very favorable, the death-rate being not quite 14 per thousand. There were three cases of cholera (two fatal) in Burmah (Thayetmo); but the epidemic did not extend to any other station, and there appears to have been no special prevalence of disease at any of the stations.

Table showing the Admissions and Deaths among the Women belonging to the European Corps stationed in the Madras Presidency during the year 1873.

	Stations.																			Grand Total.	
	Madras.	Saint Thomas Mount.	Poonamallee.	Wellington.	Palavaram.	Vizagapatam.	Trichinopoly.	Bangalore.	Cannanore.	Calicut.	Malappooram.	Ramandroog.	Bellary.	Secunderabad.	Kamptee.	Seetabuldee.	Rangoon.	Thayetmyo.	Tonghoo.		Port Blair.
Strength	113	34	28	66	148	26	36	295	82	6	7	5	124	285	147	..	105	86	58	1	1,652
Admitted	159	78	57	66	20	11	35	232	108	4	9	1	94	361	220	..	109	77	75	..	1,716
Died in hospital ..	2	..	1	..	2	..	..	2	1	..	..	..	..	4	4	..	2	3	..	..	21
Do. out of hospital ..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	2
Daily sick	7-04	2-05	2-15	2-11	1-10	0-35	1-18	7-65	2-71	0-18	2-60	0-13	2-98	12-81	6-11	..	3-44	3-71	2-75	..	61-05
Diseases.	A.	D.	A.	A.	D.	A.	A.	D.	A.	D.	A.	A.	D.	A.	D.	A.	A.	D.	A.	D.	A.
Small-pox	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	4
Fevers	4	11	5	1	3	..	5	11	27	1	..	..	3	28	72	1	22	6	..	..	212
Dengue	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cholera	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diseases of the brain ..	..	1	..	..	2	1	..	..	..	..	..	..	..	2	..	..	3	2	..	..	3
Do. of the eye	1	2	7	1	..	1	1	11	..	..	..	..	17	14	22	..	..	1	1	..	10
Do. of the lungs	1	1	2	3	..	1	1	3	..	..	..	..	..	4	3	1	4	5	5	..	78
Do. of the heart	1	2	2	..	..	..	1	..	..	..	..	..	..	4	..	..	..	..	..	..	37
Dysentery	3	..	..	3	1	1	..	9	2	..	1	..	1	14	6	1	7	3	1	..	2
Diarrhoea	2	4	2	7	6	1	1	3	6	1	2	..	1	22	3	1	8	3	6	..	56
Diseases of the liver ..	..	3	..	1	1	1	1	7	1	1	2	..	1	17	..	..	1	12	..	..	76
Abortion	..	3	..	1	1	..	1	1	3	1	1	..	..	8	..	..	1	1	6	..	38
Other diseases	138	54	41	50	14	6	26	186	70	1	6	1	54	252	3114	..	62	155	44	..	24
Total	159	278	57	66	20	21	35	232	2108	14	9	1	94	361	4220	4	109	277	875	..	1,176
Ratio per 1,000 of strength...	1407-07	2294-11	2035-70	1000-0	135-13	423-07	972-22	786-44	1317-07	666-66	1285-71	200-0	758-06	1266-66	1428-57	27-21	1038-09	895-34	1298-10	..	1038-74
	17-69																				12-71

CHILDREN.

29. The mean strength of children of the European troops during the year was 3,218. There were 1,939 admissions into hospital, and a total mortality of 152. Of the deaths, 21 occurred out of hospital.

Sickness and mortality among children.

Comparison with former years.

30. The ratio of admissions and mortality are shown for the past five years below :—

—	1869.	1870.	1871.	1872.	1873.
Admissions per mille	672·7	547·8	646·8	727·9	602·5
Deaths do. in hospital...	74·4	48·8	43·5	57·3	40·71
Died out of hospital ...	*	*	4·3	2·8	6·52

From this we see that there has been a lower ratio of sickness and mortality in 1873 than in any other year of the series. Including the deaths of children who were not entered in the hospital records, the mortality ratio for the past year has been 47·2 per mille.

31. Cholera appeared epidemically at Thayetmyo, and six deaths from that disease occurred amongst the children, but all other stations escaped the visitation, and there appears to have been nothing unusual in the type of disease. Of the total mortality of 152 children, 121 deaths occurred below two years of age. Measles was fatal in 8 cases, fevers in 10, diphtheria in 4 (this disease appeared in the families of the 67th Regiment before and after landing in Burmah), but the greater part of the deaths occurred from teething, convulsions, and diarrhoea.

Cholera.

In my Annual Report for 1872 (page 11) I alluded to the need of endeavouring to improve the milk-supply of soldiers' families, but I am not aware that any measures have been as yet sanctioned to bring about the reform.

Mortality among the Children belonging to European Corps for 1873 according to Age.

Diseases.	Ages of Children.								Total.
	Under 1 year.	1 to 2.	2 to 3.	3 to 4.	4 to 5.	5 to 10.	10 to 15.	Above 15 years	
Measles	...	6	1	1	...	...	...	...	8
Simple continued fever ...	1	3	...	...	...	...	...	...	4
Remittent fever	1	...	1	...	...	1	...	...	3
Typhoid do.	...	...	...	...	...	...	...	1	1
Intermittent do.	...	...	...	...	...	...	1	...	1
Febricula	...	...	1	...	...	...	...	...	1
Cholera	1	...	1	1	...	2	1	...	6
Scrofula	1	...	...	...	...	1	...	...	2
Diphtheria	1	2	...	...	...	1	...	...	4
Anæmia	1	...	...	...	...	...	...	...	1
Dropsy	...	...	...	1	...	...	...	...	1
Hæmorrhage	1	...	...	...	...	...	...	...	1
Inflammation of brain ...	1	...	...	...	...	...	...	...	1
Tetanus	1	...	...	...	...	...	...	...	1
Convulsions	12	5	...	1	...	...	...	...	19
Teething	5	2	1	...	...	...	...	...	8
Meningitis	2	...	...	...	...	...	...	...	2
Marasmus	...	1	...	...	...	...	...	...	1
Cyanosis	1	...	...	...	...	...	...	...	1
Bronchitis	2	...	...	...	...	...	...	...	2
Bronchial catarrh	1	...	...	...	...	...	...	...	1
Pneumonia	1	...	...	...	...	...	...	...	1
Croup	1	2	...	...	...	...	...	...	3
Diarrhœa	12	7	1	...	...	...	...	...	20
Dysentery	1	7	3	1	1	1	1	...	15
Peritonitis	1	...	...	...	...	...	...	...	1
Intus-susception	...	...	...	...	...	1	...	...	1
Dentition	4	5	...	...	...	...	...	...	9
Enteritis	1	...	...	...	...	...	...	...	1
Tonsillitis	...	...	...	...	...	1	...	...	1
Acute synovitis	...	...	1	...	...	...	...	...	1
Tabes mesenterica	3	3	...	1	...	...	...	...	7
Still-born	1	...	...	...	...	...	...	...	1
Debility	15	5	2	...	...	...	...	...	22
Total ...	72	49	12	6	1	8	3	1	152

VENEREAL DISEASES.

32. The following return shows the amount of venereal disease in the troops and registered women at the several stations during the year 1873. From it we see that in the whole British force of the Presidency there were 706 cases of primary syphilis, 275 admissions from secondary affections, and 707 from gonorrhœal affections, or in all 1,688 admissions, giving a ratio of 147·82 per mille to the average strength of the force. The ratio of admissions for primary syphilis was more than five times higher in Bellary than in Madras, where the Contagious Diseases' Act is in operation. In the station of Bellary it is quite evident that the disease was not contracted entirely from the registered women, for out of an average of 76 women on the register there were only 42 treated for primary disease during the year, whereas in Bangalore, out of an average of 77 on the register, there were 202 admissions for primary syphilis, or, in other words, each registered woman was nearly three times in hospital during the year for this particular form of disease.

Primary syphilis was prevalent in the troops at Bangalore, Kamptee, Wellington, and Calicut, and in two of these stations it was prevalent amongst the registered women. At Calicut the increase in primary syphilis is stated to have been due to one diseased woman, who, owing to the non-inclusion of the station in those to which the section of the cantonment regulations bearing on prostitutes are applicable, could not be molested.

In Madras and Rangoon the operations of the Contagious Diseases' Act appear to have been effective in controlling disease amongst the troops.

33. The average number of registered women in the several stations was **Sickness in Lock** 1,626, and amongst these were treated 962 cases of primary syphilis, 200 of secondary affections, and 1,423 of gonorrhœal affections, total 2,585.
Hospital.

The records of the several Lock Hospitals show that a good deal of disease has been prevented, but they also show that the regulations are worked with extreme difficulty, and that in a very large number of cases it has been impracticable to deal with the disseminators of disease. It might have been expected that the soldiers, for whose benefit the regulations affecting prostitutes were mainly instituted, would have seconded the efforts of the administration for the control of the disease by acting in some degree as their own police, but in practice this has not been the case, and many instances are given in which the men, instead of helping in the detection of diseased women, have sought to screen them from the operations of the cantonment rules. And, as regards the women themselves, there can be no doubt but that a large number do succeed in evading the requirements of the rules, and that the difficulties of police supervision are aggravated by the carelessness and indifference of the soldiers to measures instituted for their own protection.

34. It is a constant source of complaint that professional prostitutes are allowed to reside and ply their trade just where they please, and that being scattered over a wide area, effective supervision of them becomes impossible. It has frequently been suggested that the practice of the old Mahomedan rulers of the country, of locating women of this description in certain quarters of the town (lall bazaars), should be revived, if it be desired to exercise efficient police control over them; and on the low ground of public decency alone there is much to be said in favor of such a scheme.

Those who are practically acquainted with the subject are aware that public women, with whom the soldiers consort, are for the most part miserably housed, and that the dens they inhabit are prolific sources of disease, beyond the specific ailments for which the cantonment rules are maintained. A large number of these women, moreover, pursue their avocations after nightfall in the neighbourhood of barracks and places of public resort in such a manner that public decency is outraged. The promiscuous intercourse of the sexes is beyond the power of legislation, but it is not too much to expect that those who traffic in such things should be compelled to pursue their occupations in certain defined localities where their habits should not be an offence to the decency and propriety of respectable and modest people.

I have long been of opinion that the regulations for the control of prostitution in military stations must remain incomplete, and to a great extent ineffective, so long as this important question of the location of public women remains

unsettled. I would advocate defined quarters being assigned to them within cantonments, and visit with penalties all infringements of the regulation compelling women of the prostitute class to reside within certain limits; and, as regards regimental bazaars, huts should be provided for women who attach themselves thereto, in suitable localities, where their presence would not be an offence to other people.

Table showing the Relative Prevalence of Primary and Secondary Syphilis and Gonorrhoea amongst the British Troops and Registered Prostitutes of the Military Stations in the Madras Presidency during the year 1878.

Stations.	Troops.						Prostitutes.									
	Primary Syphilis.		Secondary Syphilis.		Gonorrhoeal Diseases.		Total Venereal Diseases.		Primary Syphilis.		Secondary Syphilis.		Gonorrhoeal Diseases.		Total Venereal Diseases.	
	Strength.	A.	Ratio per 1,000 of	A.	Ratio per 1,000 of	A.	Ratio per 1,000 of	A.	Ratio per 1,000 of	Average Monthly Number on Register.	A.	Ratio per 1,000 of	A.	Ratio per 1,000 of	A.	Ratio per 1,000 of
Madras	704	26	39.93	18	25.55	89	55.39	83	117.89	784	159	202.80	102	130.10	508	641.58
Bangalore	1,811	133	73.44	27	14.90	137	75.64	297	163.99	77	302	2623.37	66	857.14	161	1961.04
Bellary	941	191	202.97	59	63.59	91	96.70	841	863.96	76	42	552.63	3	39.47	35	460.52
Cannanore	643	7	10.88	4	6.23	49	76.20	60	93.31	24	8	333.33	2	88.33	54	2250.0
Kannipee	999	101	101.10	31	31.08	65	65.06	197	197.19	80	90	1125.0	6	75.0	117	1453.5
Rangoon	957	64	66.87	12	12.53	42	43.88	118	123.30	342	283	827.43	4	11.69	164	479.53
Secunderabad	2,434	81	33.25	51	20.93	135	55.42	267	109.60	84	42	500.0	2	23.80	64	761.90
St. Thomas' Mount.	352	8	22.72	7	19.89	86	102.27	51	144.69	35	20	571.42	...	...	96	2900.0
Thayetmye	584	8	34.36	6	10.27	11	18.83	25	43.80	18	18	1000.0	...	...	61	33.88
Trichinopoly	291	10	68.28	2	6.37	35	120.27	47	161.51	42	50	1190.47	11	261.90	32	761.90
Wellington	454	31	68.28	13	29.68	25	55.06	69	151.98	33	26	787.87	1	30.30	52	1575.75
Seetabuldee	47	1	21.27	...	...	4	35.10	5	106.38	81	22	709.67	3	96.77	98	2967.74
Ponnammallee	138	2	14.49	20	144.92	6	43.47	28	202.89	The women of these stations are sent to the St. Thomas' Mount Hospital.						
Palaveram	95	3	31.57	...	...	7	78.68	10	105.26							
Calicut	82	6	73.17	4	48.78	2	24.39	12	146.34	There are no Lock Hospitals at these stations.						
Malapporam...	80	1	12.5	2	25.0	4	50.0	7	87.5							
Ramandroog	50	...	...	2	40.0	4	60.0	4	80.0	There are no Lock Hospitals at these stations.						
Tonghoo	466	32	68.67	11	23.60	16	34.33	59	136.61							
Port Blair	102	1	9.80	1	9.80	1	9.80	3	29.41	There are no Lock Hospitals at these stations.						
European Veterans.																
Palaveram...	120	...	...	...	...	...	...	...	...	There are no Lock Hospitals at these stations.						
Vizagapatam	66	...	...	...	...	...	...	...	...							
Total	11,418	706	61.83	275	24.08	707	61.91	1,688	147.82	1,626	962	591.63	200	123.00	1,423	875.15
															2,585	1589.79

SECTION II.

STATIONAL STATISTICS—EUROPEAN TROOPS.

Madras.

(Fort Saint George.)

Latitude 13° 4' North. Longitude 80° 14' East.

Mean temperature 82°.

Average rainfall 47·18 inches.

Rainfall in 1873, 54·92 do.

35. The 7-5th Brigade Royal Artillery and 1-21st Fusiliers occupied the station throughout the year. The strength, moreover, was increased by various details of other corps sent to Madras for change, or passing through the station.

The mean strength of the force was 704, the hospital admissions 785, the daily sick 45·3, and deaths 10. Two deaths occurred out of hospital—one from drowning and one from aneurism of the coronary arteries of the heart, the man being found dead in bed :—

Comparison with former years.				36. The proportions of sickness and mortality are compared in the margin with the results of the previous seven years. The ratios for the past year are decidedly favorable :—
	Admissions.	Daily Sick.	Died.	
Mean of 7 years ending 1872.	1598.2	79.6	20.5	
1873 ...	1115.0	64.4	14.2	

Royal Artillery. Of the deaths, two were due to phthisis, dysentery two, scrofula one, aneurism two, hepatic disease two, and drowning one.

39. The admissions from venereal diseases have again diminished. However imperfectly the Contagious Diseases' Act may be worked, its effects have been manifest in a diminished ratio of ineffectives in the military in garrison. The ratios of admissions are noted in the margin.

Venereal diseases.
1869 .. 231-9
1870 .. 186-4
1871 .. 174-3
1872 .. 140-1
1873 .. 117-8

40. Measles prevailed at one time amongst the families, but there has not been any great amount of sickness. Two women and 12 children died during the year, the ratios of mortality, to strength being respectively 17-6 and 49-5 per mille.

Women and children.

41. Madras has been free of epidemic cholera throughout the past year. Some cases were landed from the S.S. *Assyria*, and sent to the Native Infirmary in September; and on a former occasion, a canal steamer from Calcutta landed a man at the General Hospital who died of cholera, but fortunately in neither instance did the pestilence take root in the town. There were, however, two or three suspicious cases in the town following upon the landing of cholera patients from the *Assyria*, but, notwithstanding the absence of cholera, the death-rate of the town has been very high. Small-pox prevailed with an intensity greater than had occurred since 1862.

Small-pox.

In 1873 this epidemic disease swept away 1,062 persons, the greater number of whom were young children unprotected by vaccination.

Fever and bowel-complaints.

Deaths from fevers were not so prevalent as in 1872, but bowel-complaints were more fatal than usual. The total of deaths registered was 14,609, giving a ratio to population of 36-4 per mille—a rate somewhat above the average of the previous 12 years, and due probably to increasing accuracy in registration.

Deaths.

42. The deaths for a series of years are shown in the following table:—

Return showing the Births and Deaths in the Town of Madras for the past 14 years.

Years.	Deaths in the Town of Madras.							Total Births.	Ratio per 1,000 of Population.	
	Small-pox.	Fever.	Dysentery.	Diar-rhoea.	Cholera.	Other Diseases.	Total.		Births.	Deaths.
1860	245	2,459	1,326	1,012	2,580	5,876	13,498	...	...	33-95
1861	655	2,169	1,353	981	2,776	5,436	13,370	...	...	33-63
1862	1,033	2,335	1,171	1,032	3,635	5,625	14,731	...	...	37-05
1863	112	2,117	1,240	914	1,684	5,791	11,858	...	...	29-82
1864	173	2,033	1,103	893	574	5,558	10,409	...	...	26-13
1865	44	2,190	1,159	1,062	944	5,817	11,316	...	...	28-31
1866	103	2,356	1,318	947	2,984	6,273	13,881	...	...	34-91
1867	623	2,456	1,420	846	614	6,286	12,346	...	...	30-80
1868	799	2,232	1,019	812	13	7,327	12,202	...	...	30-68
1869	38	2,015	888	668	568	7,065	11,262	4,612	11-60	28-32
1870	18	2,296	896	693	861	7,121	11,885	5,799	14-53	29-89
1871	234	2,474	964	932	493	7,937	13,034	5,505	21-39	32-78
1872	658	2,843	903	1,132	5	8,472	14,018	8,166	30-54	35-26
Total ...	4,735	29,830	14,760	11,924	17,731	84,629	163,609	27,082	68-11	411-48
Average ...	338-2	2130-7	1054-3	851-7	1266-5	6044-9	11686-3	6770-5	17-02	102-87
1873	1,062	2,569	1,027	1,133	6	8,302	14,609	9,382	23-59	36-49
Increase ...	723-8	438-3	...	281-3	...	2757-1	2922-7	2611-5	6-56	7-35
Decrease ...	...	...	17-3	...	1260-5	...	...	...	...	...

43. There has been some improvement in the registration of births during the year. 9,382 births were reported, or in the ratio of 23·5 per mille of population, but this branch of the Registration Department of the Municipality is still too imperfectly worked to afford results on which any dependence may be placed.

44. The water-supply has been maintained pretty well from the Red Hill reservoir throughout the year. In August the water in the lake got very low, owing, I believe, to the reckless waste of it by the cultivators, and the tank weed perished to a great extent, giving a bad odour to the water and discoloring it. At the same time there was a great development of insect life which preyed on the decaying vegetation. The early rains of September and October had the effect of remedying this condition of the water, and for some months past the supply has been ample and pure. Some arrangements are needed to shut up the irrigation sluices for those months when, under the old system, no supply would be withdrawn from the tank, and the reservoir should never be allowed to run so low as it was in August last. If this precaution be attended to, I do not think that there will be any grounds for complaining of the quality of the water in the hot months of the year.

45. The absence of cholera in the two years since the new water-supply has been available is a noteworthy fact, though too much prominence must not be given to it. Madras, in common with almost the whole of Southern India, has enjoyed a remarkable immunity from cholera during 1872 and 1873. Although the new source of supply is available for large sections of the population, it is quite certain that many of the people still draw their water from the old sources. The distributing fountains and reservoirs are not yet numerous enough to bring the water within ready reach of all, and one complete municipal division of the town with 65,547 inhabitants, and sections of some other divisions, have had no water brought to them. And again the Fort, the Penitentiary, and General Hospital are still supplied from the "seven wells;" and these localities have been just as free of cholera as those supplied with the new water. The influence of the new water-supply will be better shown, probably, when the next epidemic of cholera invades this part of the country; and there will, I trust, be plenty of time for the Municipality to complete their distribution works in the more densely inhabited portion of the town before this happens.

46. The next table is drawn up in accordance with Dr. Goodeve's suggestions, and compares the ratios of sickness and mortality of European and Native troops and prisoners in jail :—

Health of troops and
prisoners compared.

Deaths.		
1866	...	2,984
1867	...	614
1868	...	13
1869	...	568
1870	...	861
1871	...	493
1872	...	5
1873	...	6

—	Sickness.	Per Mille Ratio of Mortality.			Invaliding.
		In Hospi- tal.	Out of Hospital.	Total.	
<i>European Troops.</i>					
Average Strength, 704.					
Fevers	88.12	...	...	...	...
Dengue	...	...	...	...	...
Dysentery	39.77	2.84	...	2.84	7.10
Diarrhoea	19.88	...	...	...	1.42
Hepatitis	66.76	2.84	...	2.84	25.56
Cholera	...	...	...	...	...
Venereal diseases	117.89	...	...	...	31.42
All diseases	1115.05	11.86	2.84	14.20	150.56
<i>Native Troops.</i>					
Average Strength, 2,636.					
Fevers	182.70	0.49	0.98	1.47	...
Dengue	98.32	...	...	...	...
Dysentery	28.48	0.98	...	0.98	...
Diarrhoea	39.78	...	...	...	...
Hepatitis	1.47	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	26.52	...	...	...	...
All diseases	836.93	4.42	2.40	6.82	17.68
<i>Prisoners.</i>					
Average Strength, 590.					
Fevers	142.37	...	...	...	...
Dengue	...	...	...	...	...
Dysentery	11.86	...	...	...	...
Diarrhoea	120.33	1.69	...	1.69	...
Hepatitis	1.69	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	54.23	...	...	...	...
All diseases	764.40	5.07	...	5.07	...

Saint Thomas' Mount.

Latitude 13° 0' North. Longitude 80° 15' East.

Height above sea 40 feet.

Mean temperature 81°.

Average rainfall 41.7 inches.

Rainfall in 1873, 41.49 do.

47. The strength of the British troops at this station was 352; the number admitted into hospital was 437; the daily sick 20.6; and deaths 4. One of the fatal cases occurred out of hospital.

Strength, sickness, and mortality.

Composition of force.

48. The following table shows the sickness in each battery :—

	Corps.								Ratio per 1,000 of Strength.							
	Head-Quarters 5th Brigade R. A. and Details.		A-25th Brigade R. A.		7-6th Brigade R. A.		C. Battery 20th Brigade R. A.		Head-Quarters 5th Brigade R. A. and Details.		A-20th Brigade R. A.		7-6th Brigade R. A.		C. Battery 20th Brigade R. A.	
No. of weeks resident.	52		52		52		45									
Strength ...	24		134		78		134									
Total admis- sions.	22		137		95		183		916.66		1022.38		1217.94		1365.67	
Daily sick ...	1.30		7.21		4.95		8.36		54.16		53.80		63.46		62.38	
Died in hos- pital.	...		1		1		1		...		7.46		12.82		7.46	
Died out of hospital.	...		...		...		1		...		...		...		7.46	
	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.
Fevers ...	6	...	10	...	10	...	28	...	250	...	74.62	...	129.20	...	208.94	...
Dengue ...	...	...	4	...	...	...	11	...	...	...	29.84	...	...	...	82.08	...
Cholera ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery ...	1	...	9	...	15	...	10	...	41.66	...	67.16	...	192.30	...	74.62	...
Diarrhoea ...	2	...	6	...	11	...	14	...	83.33	...	44.76	...	141.02	...	104.47	...
Hepatitis ...	...	...	14	...	1	...	11	...	...	...	104.47	...	12.82	...	82.08	...
Venereal dis- eases.	1	...	23	...	12	...	15	...	41.66	...	171.64	...	153.84	...	111.94	...

Comparison with previous years.

	Admissions.	Daily Sick.	Deaths.
Mean of 7 years ending 1872.	1319.4	67.2	26.1
1873.	1241.4	58.7	11.3

49. Compared with the averages of seven previous years the ratios of sickness and mortality have been low. There appears to have been but little serious sickness amongst the troops.

Causes of death.

50. The only fatal cases were two of aortic aneurism, and two of drowning.

Venereal.

51. Venereal affections have been somewhat less frequent during the year than in 1872.

Women and children--health of.

52. The women and children of the station enjoyed good health. There was no death amongst the former; and of the latter, the ratio of mortality was 27.39 per mille.

Civil population.

53. The inhabitants of the bazaars have been fairly healthy, but small-pox prevailed in the early months of the year. The bazaars are kept clean, and the roads and drainage are attended to. There is a sufficiency of latrines for the population.

Sanitary suggestions.

54. The medical officer, R.A., recommends an enlargement of the boundaries of the cantonment in certain directions, so as to include some Pariah settlements which are neglected, and also a separate removal of urine from the barracks and hospitals.

55. The following table compares the sickness and mortality of the European and Native troops, and of the prisoners in Guindy Jail, two miles distant :—

Health of troops and prisoners compared.

—	Sickness.	Per Mille Ratio of Mortality			Invaliding.
		In Hospital.	Out of Hospital.	Total.	
<i>European Troops.</i>					
Average Strength, 352.					
Fevers	153·41	..	...	...	2·84
Dengue	42·61	...	...	...	...
Dysentery	99·43	...	...	...	11·36
Diarrhoea	98·75	...	...	...	...
Hepatitis	73·86	...	...	...	2·84
Cholera	...	...	...	...	...
Venereal diseases	144·89	...	...	...	11·36
All diseases	1241·48	8·52	2·84	11·36	85·22
<i>Native Troops.</i>					
Average Strength, 135.					
Fevers	66·66	...	...	...	...
Dengue	...	...	...	...	...
Dysentery	7·40	...	...	...	...
Diarrhoea	7·40	...	...	...	...
Hepatitis	...	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	22·22	...	...	...	...
All diseases	244·44	14·81	...	14·81	...
<i>Prisoners.</i>					
Average Strength, 62.					
Fevers	403·22	...	...	...	...
Dengue	...	...	...	...	...
Dysentery	16·12	...	...	...	...
Diarrhoea	...	...	...	...	...
Hepatitis	...	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	48·38	...	...	...	...
All diseases	967·74	...	...	...	...

Palaveram.

Latitude 12° 58' North. Longitude 80° 15' East.

Height above sea 60 feet.

Mean temperature 80°.

Average rainfall 41·7 inches.

Rainfall in 1873 41·49 do.

56. The effective troops at this station consist merely of detachments of the regiment quartered in Fort Saint George, residing here for rifle practice.

Strength, sickness, and mortality.

The mean strength of the detachment was 95, and there were 59 admissions to hospital, and no death.

57. The European Artillery Veteran Company is quartered also at Palaveram. The strength of the company was 120; the hospital admissions were 47; the daily sick 1·66; and deaths 3. One of the deaths occurred out of hospital.

European Veterans—sickness and mortality.

58. The admission and death rates are below the mean of four previous years, as shown in the margin. All the men composing this Veteran Company are of advanced age, and the wonder is, considering the habits and training of their youth, that the rate of mortality should be so low. The admissions from delirium tremens were fewer than in former years.

Comparison with previous years.			
	Admissions.	Daily Sick.	Deaths.
Mean of 4 years ending 1872.	675	30.7	45.3
1873..	391.6	13.8	24.9

Causes of death.

59. The causes of death were heart disease one, diarrhœa one, unknown one.

Women and children.

60. Of 148 women, there were two deaths, and of 321 children, two deaths, the ratio of mortality being 13.5 and 6.2 respectively.

Sanitary works.

61. The buildings, &c., are in fair sanitary condition, and the cantonment is kept clean.

Health of European and Native troops compared.

62. The following table compares the prevalence of disease in the European and Native troops :—

—					Sickness.	Per Mille Ratio of Mortality.			Invaliding.
						In Hospital.	Out of Hospital.	Total.	
<i>European Troops.</i>									
Average Strength, 215.									
Fevers	...	...	...	...	69.76	...	...	...	...
Dengue	...	...	...	...	...	...	...	...	...
Dysentery	...	...	...	...	4.65	...	...	...	...
Diarrhœa	...	...	...	...	13.95	4.65	...	4.65	...
Hepatitis	...	...	...	...	37.20	...	...	...	...
Cholera	...	...	...	...	...	...	...	...	...
Venereal diseases	...	...	...	...	46.51	...	...	...	...
All diseases	...	...	...	...	493.02	9.30	4.65	13.95	...
<i>Native Troops.</i>									
Average Strength, 429.									
Fevers	...	...	...	...	165.49	...	...	...	...
Dengue	...	...	...	...	30.30	...	...	...	...
Dysentery	...	...	...	...	32.63	2.33	...	2.33	...
Diarrhœa	...	...	...	...	53.61	2.33	...	2.33	...
Hepatitis	...	...	...	...	2.33	...	...	...	...
Cholera	...	...	...	...	...	...	...	...	...
Venereal diseases	...	...	...	...	48.95	...	...	...	...
All diseases	...	...	...	...	983.68	16.31	6.99	23.30	...

Poonamalee.

(Depôt.)

Latitude 13° North. Longitude 80° 10' East.
Mean temperature 80°.
Average rainfall 51.7 inches.
Rainfall for 1873 40 do.

Strength, sickness, and mortality.

63. The mean strength of troops at this invalid depôt was 138 ; the total admissions were 352 ; the average daily sick 49·2 ; and deaths 8.

Comparison with former years.

	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872.	2751·7	192·2	68·4
1873 ...	2550·7	356·8	57·9

64. The results for the year are compared with the mean ratios of sickness and mortality for the previous seven years in the margin, and they appear to show a diminished prevalence of serious diseases amongst the invalids during the year.

65. The deaths were due to phthisis four, sunstroke two, dysentery two. Many cases of severe bowel and hepatic diseases were received at the depôt. Ophthalmia prevailed to some extent in August and September.

Causes of death.

66. The strength of the women was 28, and one death occurred. The children were 73 in number, and four deaths occurred, the ratio of mortality being 35·7 per mille among the former, and 54·7 among the latter.

Women and children.

Sanitary works.

67. A special committee was appointed by Government to report upon the new barrack accommodation required for the depôt.

Vizagapatam.

European Veterans—
Strength, sickness, and mortality.

68. This station was garrisoned only by the European Veteran Company. The strength was 66 ; the hospital admissions were 39 ; the daily sick 1·7 ; and deaths 2.

The company consists entirely of old men, who have passed many years of existence in India.

Causes of death.

69. The causes of death in the two fatal cases were cancer one and jaundice one.

Trichinopoly.

Latitude 10° 20' North. Longitude 77° 10' East.

Height above sea 250 feet.

Mean temperature 83°.

Average rainfall 35 inches.

Rainfall in 1873 29·66.

Composition of force.

70. The composition of the European force at this station is shown in the following table :—

—	Corps.		Ratio per 1,000 of Strength.	
	B-20th Bri- gade R. A.	Detachment 1-21st Fusi- liers.	B-20th Brigade R. A.	Detachment 1-21st Fusiliers.
No. of weeks resident	50	52		
Strength	133	163		
Total admissions	154	270	1157·89	1656·44
Daily sick	10·01	14·40	75·26	88·34
Died in hospital	1	4	7·51	21·53
Died out of do.	...	2	...	12·26

	A.	D.	A.	D.	A.	D.	A.	D.
Fevers	26	...	19	...	195·48	...	116·56	...
Dengue	3	...	78	...	22·53	...	478·52	...
Cholera	...	...	...	...	...	...	...	...
Dysentery	7	...	20	...	52·57	...	122·69	...
Diarrhœa	2	...	2	...	15·02	...	12·26	...
Hepatitis	8	...	14	1	60·08	...	85·82	6·13
Venereal diseases	4	...	43	...	30·04	...	263·80	...

Strength, sickness, and
mortality.

71. The mean strength was 291; the hospital admissions were 424; the daily sick 24; and deaths 7. Two deaths occurred out of hospital.

72. The ratios of sickness and mortality were considerably higher in 1873 than is usual at this station. The increased admissions were due, in some measure, to the prevalence of dengue and venereal in detachments of 1-21st Fusiliers. The sickness was higher in the Fusiliers than in the Royal Artillery, and it is recorded by the medical officer that a good deal of disease was attributable to intemperance. The fatal cases nearly all occurred in men of intemperate habits.

Comparison with former years.			
	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872.	1291·8	64·7	15·9
1873 ...	1457·05	82·5	23·9

73. The assigned causes of death were sunstroke two, pneumonia one, abscess of liver one, delirium tremens one, aneurism of aorta one, and drowning one. In the latter case the man had gone into the plunge-bath while drunk, and was discovered subsequently to be drowned.

74. The admissions from venereal diseases were higher than usual, but not in the Royal Artillery. The increase was limited to the detachment of 1-21st Fusiliers.

75. The strength of the European women was 36, and no death occurred. In an average strength of 70 children there were three deaths, the ratio of mortality to strength being 8·42 per mille.

76. The sanitary condition of the barracks, hospitals, &c., is reported to be good. The station was generally healthy, but small-pox prevailed amongst the native population. One case of this disease occurred amongst the European troops. No special sanitary works have been executed in the cantonment or barracks.

77. The following table compares the sickness and mortality of European and Native troops and prisoners. The jail mortality from bowel-complaints, dropsies, and diseases of innutrition were very high :—

Health of troops and
prisoners compared.

—	Sickness.	Per Mille Ratio of Mortality			Invaliding.
		In Hospital.	Out of Hospital.	Total.	
<i>European Troops.</i>					
Average Strength, 291.					
Fevers	154.64	...	...	...	6.87
Dengue	278.35	...	...	...	...
Dysentery	92.78	...	...	...	6.87
Diarrhoea	13.75	...	...	...	...
Hepatitis	75.60	3.43	...	3.43	...
Cholera	...	...	...	...	...
Venereal diseases	161.51	...	...	...	...
All diseases	1457.05	17.18	6.78	23.96	41.23
<i>Native Troops.</i>					
Average Strength, 1,883.					
Fevers	238.97	0.53	...	0.53	...
Dengue	337.22	0.53	...	0.53	...
Dysentery	31.33	...	...	...	...
Diarrhoea	27.61	1.06	0.53	1.59	...
Hepatitis	1.06	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	16.91	...	...	...	...
All diseases	1089.75	3.71	1.59	5.30	16.99
<i>Prisoners.</i>					
Average Strength, 1,013.					
Fevers	42.44	1.97	...	1.97	...
Dengue	...	...	...	...	...
Dysentery	64.16	16.78	...	16.78	...
Diarrhoea	44.42	11.84	...	11.84	...
Hepatitis	...	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	15.79	...	...	...	...
All diseases	364.26	58.24	...	58.24	...

Wellington.

(Hill Depot and Sanitarium.)

Latitude 11° 25' North. Longitude 77° 5' East.

Height above sea 6,000 feet.

Mean temperature 64°.

Average rainfall 31 inches.

Rainfall in 1873 48½ do.

78. The average strength of the troops at this station was 454; the hospital admissions 673; the average daily sick 41.3; and deaths 10.

79. The ratios of sickness and mortality are contrasted in the margin with the results of previous years. There has been more sickness than usual, and the mortality has also been higher. In the early part of the year a large detachment of weakly recruits and

convalescents from typhoid fever joined the depôt from the 43rd Regiment at Cannanore, and many of these recruits continued sickly for some months. In March two cases of enteric fever appeared in this detachment, and in May another case occurred in an Artillery man, which proved fatal. It is worthy of note that the detachment of H. M.'s 43rd had been nearly three weeks at Wellington before the two cases of typhoid fever occurred. The medical officer remarks, "These two young soldiers have been ailing ever since they arrived from Cannanore, and I have satisfied myself that they contracted the fever before they left that station."

Measles appeared also in a detachment arriving from Secunderabad. Small-pox was epidemic in the neighbouring stations and in the bazaar at Wellington, but no case occurred in the depôt.

80. Venereal diseases were much more prevalent than usual, and the increase was observable also in Ootacamund amongst the civil population. The registration of public women is maintained, but it seems to be clear that there are many of the class who escape registration.

81. The causes of death were fevers two, phthisis two, aneurism two, pneumonia one, dysentery one, and abscess of liver two.

82. The strength of the women at this station was 66. There was no casualty amongst them. The children averaged 138, and there were five deaths amongst them, or in the ratio of 36·2 per mille. Measles prevailed amongst the families, but they were protected from small-pox by vaccination.

83. The barracks, married quarters, and hospital are described as in good sanitary state, and the station is kept clean. An ample water-supply from a mountain stream is brought in a channel from some three miles distance.

Calicut.

Latitude 11° 15' North. Longitude 75° 50' East.

Mean temperature 78°.

Average rainfall 113 inches.

Rainfall in 1873 115·35 do.

84. A detachment of one company of the 43rd Regiment L. I. occupied the station throughout the year.

85. The strength of the troops was 32; the hospital admissions 125; and the daily sick 6. No death occurred at Calicut.

86. The ratio of sickness has been higher than usual, as will be seen from the marginal table. The troops suffered a good deal from bowel and hepatic diseases and venereal. The medical officer remarks, "Five cases of venereal were traced to one prostitute living at the foot of the hill, who could not be removed, as the provisions of the Contagious Diseases' Act did not apply to the station."

Comparison with previous years.			
	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872.	857·4	37·9	19·8
1873	1524·3	73·2	...

It is worthy of note, however, that there were no cases of enteric fever, which disease affected the head-quarters at Cannanore so severely.

87. There were only six women and six children at this station, and no casualty amongst them.

88. The married quarters have been re-floored and some repairs executed. The barrack-rooms, verandahs, and solitary cells are also to be re-floored. The medical officer reports that a public latrine for native followers is required at the foot of the hill.

89. The following table shows the sickness, &c., amongst European troops and prisoners at the station :—

—	Sickness.	Per Mille Ratio of Mortality			Invaliding.
		In Hospital.	Out of Hospital.	Total.	
<i>European Troops.</i>					
Average Strength, 82.					
Fevers	195·12	...	...	...	...
Dengue	...	...	...	...	...
Dysentery	121·95	...	...	...	...
Diarrhoea	170·73	...	...	...	...
Hepatitis	109·75	...	...	...	...
Cholera	...	...	...	...	...
Veneral diseases	146·34	...	...	...	...
All diseases	1524·39	...	...	...	...
<i>Prisoners.</i>					
Average Strength, 129.					
Fevers	232·55	...	...	...	...
Dengue	...	...	...	...	...
Dysentery	85·27	...	...	...	...
Diarrhoea	108·52	...	...	...	...
Hepatitis	...	...	...	...	...
Cholera	...	...	...	...	...
Veneral diseases	15·50	...	...	...	...
All diseases	875·96	15·50	...	15·50	...

Malliapoeram.

90. This station was occupied for the whole year by a detachment of the 43rd Light Infantry.

91. The strength of the troops was 80; the hospital admissions 114; the daily sick 5·19; and 1 man died.

92. The ratios of sickness were much above the average, though the mortality was lower than usual. The troops newly arrived from Europe suffered severely from bowel-complaints and hepatitis; but, as was the case with Calicut, the detachment escaped enteric fever.

Comparison with previous years.			
	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872.	885·5	40·4	17·7
1873 ...	1415·0	64·8	12·5

Cause of death,

93. The fatal case was one of hepatitis.

94. There were only seven women and four children at the station, and there was no mortality amongst them.

95. The hospital verandah has been floored with asphalte, and a new gymnasium built. The medical officer reports that the cells and guard-room require to be ventilated, and that representations to this effect have already been made.

Bangalore.

Latitude 12° 57' North. Longitude 77° 38' East.
Height above sea 3,000 feet.
Mean temperature 75° 40'.
Average rainfall 25 inches.
Rainfall in 1873 29·16 do.

96. The following table shows the composition of the force at Bangalore in 1873 :—

	Corps.							Ratio per 1,000 of Strength.						
	Garrison.	H. M's 18th Hussars.	E Battery 20th Brigade R. A.	89th P. V. Regiment.	C-9th Brigade R. A.	C-C Brigade R. H. A.	Head-Quarters C Brigade R. H. A.	Garrison.	H. M's 18th Hussars.	E Battery 20th Brigade R. A.	89th P. V. Regiment.	C-9th Brigade R. A.	C-C Brigade R. H. A.	Head-Quarters C Brigade R. H. A.
No. of weeks resident ...	52	52	45	52	45	43	43							
Strength ...	35	449	139	922	148	171	19							
Total admissions ...	7	338	216	892	213	320	25	200	752·78	1553·95	967·46	1439·18	1871·34	1315·78
Daily sick ...	0·25	18·60	11·27	45·10	11·83	16·53	1·60	7·14	41·42	81·07	46·91	79·93	96·66	78·94
Died in hospital ...	...	1	2	5	1	3	...	...	2·004	14·38	6·42	6·75	17·54	...
Died out of do. ...	...	1	...	2	...	...	...	...	2·004	...	2·16	...	...	...
	A	D	A	D	A	D	A	D	A	D	A	D	A	D
Fevers ...	2	36	21	...	179	40	54	...	57·14	80·17	151·07	194·14	270·27	315·78
Dengue ...	...	...	...	...	...	5	18	...	...	...	...	33·78	...	105·26
Cholera ...	...	...	...	...	...	...	...	...	...	...	...	...	...	210·53
Dysentery ...	...	9	6	...	64	16	40	2	...	20·04	43·14	69·41	108·08	233·91
Diarrhoea ...	...	13	14	...	12	17	31	...	...	28·95	100·70	13·01	114·86	181·28
Hepatitis ...	2	22	7	...	41	215	1	9	...	57·14	48·99	60·35	44·46	52·63
Venereal disease...	...	63	39	...	152	12	28	...	...	140·28	280·57	164·85	81·06	163·74

97. The strength of the troops was 1,811 ; the hospital admissions 2,011 ; the average daily sick 98·8 ; and deaths 15. Three of the fatal cases occurred out of hospital.

98. The ratios of sickness and mortality are contrasted in the margin with the mean results of the previous seven years, and it will be observed that there has been a considerable diminution in the mortality in 1873, the death-ratio being but a little more than eight per mille.

99. Cases of dengue fever occurred in the Royal Artillery, chiefly among newcomers to the station. A good many cases of malarious fever occurred in the 89th Regiment, contracted on the march across a jungly district from Cannanore, but this corps had no enteric fever. Nine cases of the latter disease were admitted in the Royal Artillery and Hussars ; some of them very severe, but there were no deaths from it.

but the troops were well protected by vaccination, and not a single case occurred among them. The admissions from venereal disease were highest in E Battery 20th Brigade and C-C Brigade Royal Horse Artillery, both newly arrived at the station. The mortality was only about one-half of that of the previous year.

Venereal diseases. 100. The causes of death were apoplexy one, heart disease one, bronchitis one, dysentery two, hepatic diseases five, Brights' disease one, drowning two, fracture of skull one, and gun-shot wound (self-inflicted) one.

Causes of death. 101. The strength of the women at Bangalore was 295, and there were two deaths amongst them, giving a ratio of 6·7 per mille. The children numbered 578, and 24 died, the ratio being 41·5 per thousand. There was one case of small-pox amongst the women and two in the children. The mortality amongst the latter was mainly due to diseases incidental to childhood.

Women and children. 102. The following is a list of the more important works executed in the year by the Municipality :—

Sanitary works. (1) A covered stone-built sewer, 2,100 feet long, to intercept the sewage flowing into the Choolay tank ; (2) a box drain, 300 feet long, along the south side of the grass-cutters' lines ; (3) two under-ducts and three sewage traps across the main channel into the main sewer, to intercept the sewage flowing into the Ulsoor tank ; (4) a box drain with stone slabs from Ulsoor across the main channel, to intercept the sewage from the milkmen's quarters ; (5) 25,633 feet of side drains with stone slabs, and 433 squares of the bed of the main channel have been flagged to prevent the lodgment of stagnant water. Several new wells were sunk and others cleared out ; and five latrines were built.

103. The water-supply works had made some progress during the year, but the distributing cistern in the Commissariat square was not completed. One of the filters at the Ulsoor lake was repaired, but would not hold water after much money had been expended on it by the Public Works Department. It remains in a useless condition. The supply from the dhobies' wells alone is not sufficient for the wants of the military, and the Ulsoor water, even after filtration, can scarcely be considered a safe source of supply. It is to be hoped that ere long Government may be pleased to sanction a scheme for the supply of the whole of this important station with good water.

Water-supply. 104. The following table exhibits the sickness, mortality, and invaliding of the European troops, compared with the Native troops at the station :—

Health of European and Native troops compared.

—	Sickness.	Per Mille Ratio of Mortality.			Invaliding.
		In Hospi- tal.	Out of Hospital.	Total.	
<i>European Troops.</i>					
Average Strength, 1,811.					
Fevers	...	...	...	...	1.10
Dengue	...	...	...	...	...
Dysentery	...	...	...	...	8.28
Diarrhœa	...	...	...	...	0.55
Hepatitis	...	...	...	...	8.83
Cholera	...	...	...	...	...
Venereal diseases	...	...	...	...	4.42
All diseases	...	...	...	...	67.30
<i>Native Troops.</i>					
Average Strength, 2,080.					
Fevers	...	...	...	...	...
Dengue	...	...	...	...	...
Dysentery	...	...	...	...	...
Diarrhœa	...	...	...	...	...
Hepatitis	...	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	...	...	...	...	...
All diseases	...	...	...	...	...

Cannanore.

Latitude 11° 59' North. Longitude 75° 30' East.

Height above sea 15 to 30 feet.

Mean temperature 78°.

Average rainfall 121 inches.

Rainfall in 1873 70 do.

105. The following table shows the strength and constitution of the force :—

	Corps.								Ratio per 1,000 of Strength.							
	1.5th Brigade R. A.		43rd Light Infantry.		Detachment 89th Regt.		Garrison.		1.5th Brigade R. A.	43rd Regiment L. I.	Details 89th Regiment.	Garrison.				
No. of weeks resident ...	52		52		3		52									
Strength	71		563		9		9		1478.87	1802.84	...	333.33				
Total admissions ...	105		1,015		3		3		57.04	68.59	135.55	31.11				
Daily sick	4.05		38.62		1.22		0.28		14.08	26.64	...	...				
Died in hospital ...	1		15		...		...		...	...	...	...				
Died out of do. ...	...		...		...		...		...	...	...	...				
	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.
Fevers	13	1	141	5	...	...	1	...	183.09	14.08	250.44	8.88	...	...	111.11	...
Dengue	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery	10	...	161	1	...	...	...	...	140.84	...	235.96	1.77	...	...	...	...
Diarrhoea	1	...	106	...	...	...	...	...	14.08	...	188.27	...	...	...	...	...
Hepatitis	26	...	114	7	...	...	...	...	366.18	...	202.48	12.43	...	...	...	...
Venereal diseases...	7	...	53	...	...	...	...	...	98.59	...	94.13	...	...	...	...	...

Strength, sickness, and mortality.

106. The mean strength for the year was 643 men; the hospital admissions 1,123; the daily sick 43·01; and deaths 16.

107. The ratios of admissions, daily sick, and mortality are compared in the

Comparison with previous years.			
	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872.	1169·9	51·5	15·6
1873 ...	1746·5	66·8	24·8

margin with the results of seven previous years.

It will be observed that sickness and mortality have been very heavy during the past year, and this result has been due, I think, in a great measure to the fact that the 43rd Regiment on arrival consisted mainly of raw recruits of immature frames, who began to suffer immediately on arrival from enteric fever, diarrhoea, dysentery, and subsequently hepatic diseases. Upwards of a 100 of the most immature of the recruits were selected by Dr. Massy to be sent up to Wellington; but, notwithstanding the increased space given to the remaining men in barracks, the sickly condition of the men continued throughout the two first quarters of the year. A portion of the corps was moved into tents, but without any effect on the proportion of admissions from fever. Throughout the third quarter of the year the corps continued sickly, the mortality including several cases of hepatic abscess. In December the regiment marched to join the Camp of Exercise at Bangalore. With regard to enteric fever the disease was confined to H. M.'s 43rd Regiment. One man of the Artillery, in hospital for another disease, was attacked and died, but no other case occurred in the Royal Artillery.

108. The causes of death were fever (enteric) six, phthisis two, dysentery one, abscess of liver six, and cirrhosis of liver one. The large number of cases of liver abscess in a regiment during its first year of service is unusual, and is to be explained probably in the great prevalence of diarrhoea and dysentery.

109. The general ill-health of the troops was not so noticeable among soldiers' wives. Of a strength of 82, only one died, the ratio of mortality being 12 per thousand. Of 124 children, three died, the ratio of mortality being 24·1 per mille.

110. An important sanitary measure was decided upon by Government, viz., to bring within municipal limits all the portions of the cantonment forming the "Karar," or private estate of the Beebee of Cannanore. Hitherto these lands were exempted from municipal control and management, and the sanitary condition of a settlement near the barracks had been the subject of constant anxiety to the local authorities. During the year steps were taken to improve the cleanliness of this suburb, and to provide latrines for the accommodation of the people.

The barracks of the Infantry Regiment at Cannanore are old, and in some respects unsatisfactory, and suggestions were made to Government for their improvement, and the proposals made were generally sanctioned and ordered to be carried out. They include the following:—

(1) The boarded flooring of the barracks to be carefully relaid, with the space underneath the boards so arranged as to allow of a current of air circulating between the earthen floor and the boards; (2) removal to some other spot of the objectionable buildings, latrines, cook-rooms, canteen, liquor godowns, and a bazaar shop situated on the sea-face of the barracks, as obstructing the pure sea

breeze, and the earth or other flooring of the latrines to be taken up and renewed with fresh well-rammed laterite clay, and that dry earth be used in the latrines, and the tubs, &c., kept clean and well tarred; (3) removal of a row of buildings in the rear of the barracks, formerly the Serjeants' quarters, but at present used as drying rooms, as obstructing the breeze on the land side of the building and making the barrack square hotter and closer than need be; (4) improvement of the drainage of the barrack square and subsidiary buildings by putting down glazed earthen-ware pipes to carry off to the sea the wash-water of cook-rooms, lavatories, &c.; (5) proper conservancy and covering in of the wells used for drinking purposes; (6) removal further back of the guard-room and prison cells with their respective latrines, at present objectionably close to the main buildings on the north-west side of the barrack square, their tendency being to block up and bring nuisances close to the men sleeping on that side of the barracks; (7) an arched opening to be made on the sea-face side of the barracks to allow of free admission of the sea breeze into the interior of the square, with a similar opening on the north-east side also; and (8) the wash-houses, which are of old pattern and insufficient in accommodation, to be replaced by better and more commodious ones, and a fresh-water plunge-bath, to accommodate the Artillery men also.

111. The following table shows the sickness, mortality, and invaliding among the European and Native troops and the prisoners in jail. The contrast as regard fevers and bowel-complaints amongst natives and Europeans is very marked:—

	Sickness.	Per Mille Ratio of Mortality			Invaliding.
		In Hospital.	Out of Hospital.	Total.	
<i>European Troops.</i>					
Average Strength, 643.					
Fevers	241·06	9·33	...	9·33	1·55
Dengue	...	...	...	...	...
Dysentery	265·94	1·56	...	1·56	26·43
Diarrhoea... ..	166·40	...	...	...	...
Hepatitis... ..	217·72	10·88	...	10·88	24·88
Cholera	...	...	...	...	...
Venereal diseases	83·31	...	...	...	1·55
All diseases	1746·50	24·88	...	24·88	144·63
<i>Native Troops.</i>					
Average Strength, 1,280.					
Fevers	30·46	...	...	...	...
Dengue	...	...	...	...	...
Dysentery	10·93	...	...	...	...
Diarrhoea... ..	...	...	...	...	...
Hepatitis... ..	...	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	7·81	...	...	...	...
All diseases	240·62	0·78	3·12	3·90	39·06
<i>Prisoners.</i>					
Average Strength, 582.					
Fevers	44·67	...	...	...	...
Dengue	...	...	...	...	...
Dysentery	39·51	1·71	...	1·71	...
Diarrhoea... ..	13·74	1·71	...	1·71	...
Hepatitis... ..	...	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	6·87	...	...	1·890	...
All diseases	225·08	18·90	...	...	...

Bellary.

Latitude 17° North. Longitude 97° East.

Height above sea 1,500 feet.

Mean temperature 80°.

Average rainfall 16·83 inches.

Rainfall in 1873 20·48 do.

112. The composition of the force at Bellary is shown in the following table :—

	Corps.				Ratio per 1,000 of Strength.			
	G-18th Brigade Royal Artillery.		H. M.'s 48th Regiment.		G-18th Brigade Royal Artillery.		H. M.'s 48th Regiment.	
No. of weeks resident	52		52					
Strength	135		806					
Total admissions	127		806		940·74		1000·0	
Daily sick	7·85		51·98		58·14		64·49	
Died in hospital	2		10		14·81		12·40	
Do. out of hospital	...		2		...		2·48	
	A.	D.	A.	D.	A.	D.	A.	D.
Fevers	13	...	127	2	96·29	...	157·56	2·48
Dengue	...	...	...	...	...	...	...	...
Cholera	...	...	...	...	...	...	...	...
Dysentery... ..	4	...	12	1	29·62	...	14·88	1·24
Diarrhoea	5	...	23	...	37·04	...	28·53	...
Hepatitis	5	1	16	2	37·04	7·40	19·84	2·48
Venereal diseases	34	...	307	1	251·85	...	380·89	1·24

113. The strength of the troops was 941; the hospital admissions 933; the daily sick 59·8; and deaths 14. Two of the latter occurred out of hospital.

114. The ratios of sickness and mortality for the past year are contrasted in the margin with the results of the seven previous years. The mortality has been above the average, but the admissions were fewer than usual. The increase in daily sick is attributable to the large proportion of venereal cases coming under treatment.

There has been no special prevalence of disease at Bellary, with the exception of venereal, and the admissions from this cause have continued high all through the year. It is well ascertained that the men do not contract it from the registered women, but from villagers who prowl about the cantonment at night, and whom the police apparently are unable to detect.

115. The causes of death were fevers two, phthisis one, disease of brain two, heart disease two, dysentery one, abscess of liver three, stricture of urethra one, and accidental drowning two.

116. The average strength of the women was 124, and 94 were treated in hospital during the year. There was no death.

The strength of the children was 220; the hospital admissions 136; and

deaths 12, the ratio of mortality to strength being 54·5 per mille. Ophthalmia was prevalent during the monsoon months amongst the families.

117. The barracks and hospitals are reported to be in an efficient sanitary condition. The cantonment is under the control of the Municipality, and as regards the native town improvements are in progress. During the year a new feeder to the principal tank was constructed, so as to enlarge the water-supply of Brucepettah.

Health of troops and prisoners compared.

118. The following table shows the sickness, &c., among the European and Native troops and prisoners in jail :—

—	Sickness.	Per Mille Ratio of Mortality			Invaliding.
		In Hospi- tal.	Out of Hospital.	Total.	
<i>European Troops.</i>					
Average Strength, 941.					
Fevers	148·77	2·12	...	2·12	...
Dengue	...	...	...	...	...
Dysentery	17·00	1·06	...	1·06	2·12
Diarrhœa	29·75	...	...	...	1·06
Hepatitis	22·31	3·18	...	3·18	4·25
Cholera	...	...	...	...	...
Venereal diseases	362·38	1·06	...	1·06	3·18
All diseases	921·49	12·75	2·12	14·87	38·26
<i>Native Troops.</i>					
Average Strength, 1,548.					
Fevers	116·91	0·64	...	0·64	...
Dengue	13·56	...	...	...	...
Dysentery	14·85	...	...	...	...
Diarrhœa	14·21	...	...	...	...
Hepatitis	1·29	0·64	...	0·64	...
Cholera	...	...	...	...	...
Venereal diseases	10·98	...	...	...	...
All diseases	477·39	3·22	2·58	5·80	35·53
<i>Prisoners.</i>					
Average Strength, 363.					
Fevers	55·09	2·75	...	2·75	...
Dengue	...	...	...	...	...
Dysentery	2·75	...	...	...	...
Diarrhœa	5·50	...	...	...	...
Hepatitis	...	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	24·79	...	...	...	...
All diseases	374·65	13·77	...	13·77	...

Ramandroog.

(*Convalescent Dépôt.*)

Latitude 15° 8' North. Longitude 76° 33' East.

Height above sea 3,400 feet.

Mean temperature 73°.

Average rainfall 36 inches.

Rainfall in 1873 21·83 do.

Strength, sickness,
and mortality.

119. The average strength of the troops at this depôt was 50. There were 48 hospital admissions, and the daily sick averaged 2·5.

None of the convalescents transferred to this depôt died.

The chief admissions were from fevers.

Women and children.

120. There were 5 women and 11 children at the depôt, and of the latter, one died.

Secunderabad and Trimulgherry.

Latitude 17° 28' North. Longitude 78° 32' East.

Height above sea 1,800 feet.

Mean temperature 79°.

Average rainfall 28 inches.

Rainfall in 1873 21·83. do.

Composition of force.

121. The following table shows the composition of, and the principal causes of sickness in, the several bodies of troops :—

122. The mean strength of the force was 2,436; the hospital admissions numbered 3,114; the daily number of men inefficient from sickness averaged 124·6; and 54 men died during the year. Of these 5 occurred out of hospital.

123. The ratios of sickness and mortality in this large force for 1873 contrast favorably with the mean results of the preceding seven years, as shown in the margin. The year has been on the whole a healthy one, though a good deal of dysentery and hepatic disease prevailed amongst the European troops. The hepatic disease appears in almost all the cases to have followed upon dysentery, and a large number of fatal cases of hepatic abscess are recorded.

124. Venereal diseases were not at all prevalent during the year, and the proportion of admissions from this cause was lower than usual.

125. The recorded causes of death are as follow :—Remittent fever 2, phthisis 1, apoplexy 1, aneurism of aorta 2, heart disease 1, pneumonia 2, dysentery 18, abscess of liver 22, narcotic poison 1, drowning 2, and gun-shot wound (suicide) 2.

The following table continues the experience in regard to the health of troops at Trimulgherry and Secunderabad for the year 1873. The sickness and mortality, as usual, has been much the heaviest in the 16th Lancers occupying the old barracks at Secunderabad. During the year a portion of the regiment was moved out to North Trimulgherry, to the new barracks in course of erection, and with manifest advantage to the health of the men. It is hoped that the progress of the works will soon permit of the whole regiment being accommodated in the new barracks :—

—	Ratio per Mille of Strength.										
	1860 to 1868.	1864.	1865.	1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.
<i>(Secunderabad old barracks.)</i>											
Admissions...	1837·4	1573·7	1605·0	1981·9	1777·7	1157·7	1478·7	1297·4	1628·5	1533·5	1411·9
Deaths ...	23·4	13·7	18·9	43·2	26·04	41·7	25·09	16·3	124·6	38·3	33·04
<i>(Trimulgherry new barracks.)</i>											
Admissions...	1259·2	1549·6	1419·0	1353·2	1395·4	1434·3	1098·8	1046·4	1197·1	1051·06	1305·7
Deaths ...	12·04	7·6	23·1	25·8	32·9	24·9	31·05	19·1	22·02	20·4	20·8

126. The strength of the women at Secunderabad was 285; six women died, the ratio of deaths to strength being 16·67. The strength of children was 555, and 27 died, the rates being 48·64 per mille. There appears to have been no epidemic disease, but bowel-complaints and teething caused most of the mortality amongst the children.

127. The following remarks are quoted from the Sanitary Report for the year :—

"The work commenced in 1864, and which has never yet ceased, viz., opening out, as funds and opportunity permit, crowded portions of the bazaars by removing dwellings, forming communications, and laying out lines of drain, has been carried on with the same perseverance during the last year.

"Amongst the works of last year was the opening out of one large area by the purchase and removal of the old distillery from what was formerly a very unhealthy neighbourhood.

"Six latrines were constructed and completed during the year 1873; six more are in course of construction.

"A main drain in Chetmee bazaar also is in course of construction.

"The usual attention has been paid to the conservancy of the bazaars.

"A scheme for the supply of water to the town has been elaborated, but is deferred, pending orders from the Local Government.

"A dhoby ghaut has been constructed, and several new military communications were opened.

"Nothing has been done to drainage since last report.

"Water-supply of 2nd Regiment completed and ready for the service of regiment from 1st April 1874, when funds for working will be available. Some additional taps have still to be supplied as lately recommended, and will be supplied by that date.

"No further improvements have been made."

128. The following table shows the sickness and mortality among the Health of European and Native troops compared. European and Native troops at the station. Malarious fevers have been prevalent among the Native troops:—

	Sickness.	Per Mille Ratio of Mortality			Invaliding.
		In Hospital.	Out of Hospital.	Total.	
<i>European Troops.</i>					
Average Strength, 2,436.					
Fevers	183.49	0.82	...	0.82	...
Dengue	0.82	...	...	...	...
Dysentery	113.30	7.39	...	7.39	24.63
Diarrhœa	108.37	...	...	...	0.82
Hepatitis	94.00	9.03	...	9.03	9.03
Cholera	...	...	...	...	...
Veneral diseases	109.60	...	...	...	4.51
All diseases...	1278.32	20.11	2.05	22.16	79.22
<i>Native Troops.</i>					
Average Strength, 3,239.					
Fevers	578.25	1.22	0.60	1.82	...
Dengue	...	...	...	...	...
Dysentery	15.74	...	...	...	...
Diarrhœa	19.14	0.30	...	0.30	...
Hepatitis	2.16	0.30	...	0.30	...
Cholera	...	...	...	...	...
Veneral diseases	13.27	...	...	...	...
All diseases...	1086.75	6.17	1.85	8.02	13.89

Kamptee.

Latitude 21° 16' North. Longitude 79° 14' East.

Height above sea 900 feet.

Mean temperature 80°.

Average rainfall 41.8 inches.

Rainfall in 1873 31.53 do.

Composition of force.

129. The troops stationed at Kamptee during the year are shown below :—

	Corps.			Ratio per 1,000 of Strength.								
	H. M.'s 44th Regi- ment.	D-20th Bri- gade R. A.	G Battery 20th Bri- gade R. A.	H. M.'s 44th Regiment.	D-20th Bri- gade R. A.	G Battery 20th Brigade R. A.						
No. of weeks resident ...	52	47	46									
Strength	767	124	136									
Total admissions ...	1,545	181	249	2014·34	1459·67	1830·88						
Daily sick	46·95	7·81	8·87	61·21	62·98	65·22						
Died in hospital ...	4	1	1	5·21	8·06	7·35						
Died out of do....	5	...	1	6·5	...	7·35						
	A.	D.	A.	D.	A.	D.						
Fevers	870	1	51	1	67	...	1134·28	1·30	411·29	8·06	492·64	...
Dengue... ..	14	...	14	...	30	...	18·25	...	112·90	...	220·58	...
Cholera	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery	13	...	10	...	8	...	16·94	...	80·64	...	58·82	...
Diarrhoea	59	...	3	...	4	...	76·92	...	24·18	...	29·41	...
Hepatitis	12	...	2	...	11	1	15·64	...	16·12	...	80·88	7·35
Venereal diseases	178	...	10	...	9	...	232·07	...	80·64	...	66·17	...

130. The mean strength of the force was 999; the hospital admissions were 1,975; the daily average of sick 61·72; and deaths 12. Of the deaths, six occurred out of hospital, and three were the result of accidental causes occurring under the influence of liquor.

131. The ratios of sickness and mortality for the past year are contrasted in the margin with the mean results of the previous seven years. The admissions have been a little in excess of the average, and the mortality has been less. The principal causes of admission into hospital were ague, dengue, and venereal diseases. Small-pox prevailed epidemically in the station in the early months of the year. Four cases occurred and one death. It is recorded that all the men attacked had good vaccine marks.

132. The recorded causes of death are as follow :—Small-pox one, remittent fever two, sunstroke one, aneurism of the aorta three, abscess of liver one, alcoholic poisoning two, drowning one, and over-laid when drunk one.

133. The strength of the women was 147; there were 220 admissions into hospital and four deaths, the death-ratio being 27·2 per mille.

134. The children numbered 211, and 16 deaths were recorded, 4 out of hospital; the ratio of mortality was 75·8 per mille. Fever and ophthalmia were the most prevalent diseases in the families.

135. The drainage of the bazaar is being gradually carried out. The sanitary officer complains of swampy ground to the south of the part occupied by European troops which was noticed by the

Sanitary Commissioner five years since as emergently requiring to be drained. Nothing appears to have been done to remedy the evil.

Health of European
and Native troops com-
pared.

136. The following table compares the sickness, mor-
tality, and invaliding of the European and Native troops at
the station :—

—	Sickness.	Per Mille Ratio of Mortality			Invaliding.
		In Hospital.	Out of Hospital.	Total.	
<i>European Troops.</i>					
Average Strength, 999.					
Fevers	988.97	2.00	...	2.00	2.00
Dengue	57.05	...	...	...	...
Dysentery	31.03	...	...	...	2.00
Diarrhoea	66.06	...	...	...	1.00
Hepatitis... ..	25.02	1.00	...	1.00	5.00
Cholera	...	...	...	...	...
Veneral diseases	197.19	...	...	...	6.00
All diseases	1876.98	6.006	6.006	12.01	38.03
<i>Native Troops.</i>					
Average Strength, 1,203.					
Fevers	295.92	0.83	...	0.83	...
Dengue	458.85	0.83	...	0.83	...
Dysentery	12.45	...	...	...	...
Diarrhoea	12.45	0.83	...	0.83	...
Hepatitis... ..	3.32	...	...	...	...
Cholera	...	...	...	...	...
Veneral diseases	9.96	...	...	...	...
All diseases	1158.76	10.80	2.49	13.29	19.95

Seetabuldee.

Latitude 2°110' North. Longitude 79° 9' East.

Height above sea 939 feet.

Mean temperature 80°.

Average rainfall 46.5 inches.

Rainfall in 1873 38.93 do.

137. The station was occupied by a detachment of the 44th Regiment, whose head-quarters are at Kamptee.

138. The strength of the detachment was 47; the hospital admissions were 61; and daily sick 1.08.
Strength, sickness,
and mortality.

Dengue and malarious fevers were prevalent. There was no death.

139. There were no women or children at the station.

Sanitary works.

140. None.

Health of Euro-
pean and Native
troops compared.

141. The following table shows the sickness and mortality
among the European and Native troops :—

	Sickness.	Per Mille Ratio of Mortality			Invaliding.
		In Hospital.	Out of Hospital.	Total.	
<i>European Troops.</i>					
Average Strength, 47.					
Fevers	297·87	...	...	...	...
Dengue	468·09	...	...	...	...
Dysentery	42·55	...	...	...	...
Diarrhoea... ..	...	...	...	...	...
Hepatitis... ..	...	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	106·38	...	...	...	...
All diseases ...	1297·87	...	...	...	...
<i>Native Troops.</i>					
Average Strength, 426.					
Fevers	720·65	...	...	...	...
Dengue	1880·28	...	...	...	...
Dysentery	32·86	...	...	...	...
Diarrhoea... ..	7·02	...	...	...	...
Hepatitis	4·68	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	30·51	...	...	...	...
All diseases ...	2997·65	2·34	4·69	7·03	...

Rangoon.

Latitude 26° 48' North. Longitude 96° 10' East.

Height above sea 80 feet.

Mean temperature 80°.

Average rainfall 80 inches.

Rainfall in 1873 124 do.

142. The following table shows the strength and composition of the force :—

Composition of force.

	Corps.						Ratio per 1,000 of Strength.									
	Garrison.	2-10th Regiment.	6-5th Brigade R. A.	2-5th Brigade R. A.	H. M.'s 67th Regiment.	Detachment 45th Regiment S. F.	Garrison.	2-10th Regiment.	6-5th Brigade R. A.	2-5th Brigade R. A.	H. M.'s 67th Regiment.	Detachment 45th Regiment S. F.				
No. of weeks resident	52	2	52	52	52	5										
Strength	89	472	73	74	729	257										
Total admissions.	16	1	58	62	865	37	410·25	2·11	794·52	837·83	1186·55	143·96				
Daily sick	0·60	6·78	3·27	3·67	28·08	15·38	15·38	14·36	44·79	49·59	38·51	59·84				
Died in hospital..	...	...	1	2	9	4	...	...	13·69	27·02	12·34	15·58				
Died out of do.	...	...	...	1	...	1	...	...	...	18·51	...	3·89				
	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.
Fevers	3	1	...	2	88	1	76·92	2·11	...	27·02	...	120·71	1·37	3·89	...	...
Dengue	...	...	...	...	106	...	...	...	...	...	...	145·40	...	...	...	...
Cholera	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery	3	...	...	...	56	1	76·92	...	...	...	...	76·81	1·37	19·45	11·67	...
Diarrhoea	...	...	1	2	99	2	...	...	13·69	27·02	...	135·80	...	7·78	...	...
Hepatitis	1	...	10	1	7	1	25·64	...	136·98	13·69	94·59	13·51	39·78	2·74	7·78	...
Venereal diseases.	...	...	9	6	97	6	...	...	123·28	...	81·08	...	133·05	...	23·34	...

143. The mean strength of the troops was 957; the hospital admissions 1,039; the average daily sick 37·3; and deaths 18. Two deaths occurred out of hospital.

144. The ratios of sickness and mortality for the past year are compared in the margin with the results of seven previous years. The admissions into hospital have been below the average, and the mortality somewhat higher. The 67th Regiment had newly arrived from England, and the admissions and casualties from bowel-complaints and liver disease were high. Three cases of enteric fever occurred in the first week of residence of the 67th Regiment, and a few other cases later in the year. Epidemic cholera prevailed for some months in Rangoon, but the only case occurring in the regiment was that of the Paymaster, who died of the disease.

145. The arrangements for the control and registration of public women in this large port and garrison are working well, and the admissions, considering that a new regiment has been occupying the station, are but few.

146. The causes of death were enteric fever one, phthisis one, sunstroke and apoplexy two, aneurism of aorta three, dysentery four, abscess of liver four, fracture of skull one, rupture of urethra one, and gun-shot wound (self-inflicted) one.

147. The strength of the women was 105, and two died during the year, the ratio being 19·04 per mille. The children numbered 159, and of these 17 died, the ratio of mortality being 106·0 per mille. It will be remembered that diphtheria broke out amongst the families on board the transport *Malabar* before they were landed in Rangoon. The disease continued to prevail for some weeks after the arrival of the corps, and the mortality from this cause has added considerably to the death-rate.

148. The sanitary works executed during the year consisted in the formation of one tank, and deepening others. One well was also sunk, and others cleaned out.

149. The following table shows the comparative sickness and mortality of European and Native troops at the station :—

						Sickness.	Per Mille Ratio of Mortality			Invaliding.
							In Hospital.	Out of Hospital.	Total.	
<i>European Troops.</i>										
Average Strength, 957.										
Fevers	...	...	...	...	...	99·26	1·04	...	1·04	...
Dengue	...	...	...	...	...	110·76	...	...	...	...
Dysentery	...	...	...	...	...	66·87	4·18	...	4·18	3·13
Diarrhoea	...	...	...	...	...	108·67	...	...	...	...
Hepatitis	...	...	...	...	...	51·20	4·18	...	4·18	5·22
Cholera	...	...	...	...	...	...	...	...	...	...
Venereal diseases	...	...	...	...	...	123·30	...	...	...	3·13
All diseases	...	...	...	...	...	1085·68	16·72	2·09	18·81	29·25

—	Sickness.	Per Mille Ratio of Mortality			Invaliding.
		In Hospital.	Out of Hospital.	Total.	
<i>Native Troops.</i>					
Average Strength, 1,733.					
Fevers	59·43	1·14	...	1·14	...
Dengue	...	...	...	...	...
Dysentery	25·88	...	...	...	...
Diarrhoea	31·15	1·73	...	1·73	...
Hepatitis	...	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	16·15	...	...	...	...
All diseases	378·53	10·38	1·15	11·53	...

Thayetmyo.

Latitude 20° 18' North. Longitude 92° 46' East.
Height above sea 240 feet.
Mean temperature 80°.
Average rainfall 48·3 inches.
Rainfall in 1873 43·42 do.

Composition of force. 150. The troops at the station included the 45th Regiment, Sherwood Foresters, and F. Battery, 25th Brigade, Royal Artillery.

	Corps.				Ratio per 1,000 of Strength.			
	Head-Quarters H. M.'s 45th Regiment, S. F.		F Battery, 20th Brigade, R. A.		Head-Quarters H. M.'s 45th Regiment, S. F.		F Battery, 20th Brigade, R. A.	
No. of weeks resident	52		52					
Strength	442		142					
Total admissions	421		110		952·48		774·64	
Daily sick	17·76		4·46		40·18		31·41	
Died in hospital	16		4		36·19		28·16	
Died out of hospital	8		...		6·78		...	
	A.	D.	A.	D.	A.	D.	A.	D.
Fevers	52	2	6	...	117·64	4·52	42·25	...
Dengue	...	...	...	...	...	...	...	...
Cholera	14	8	6	4	31·64	18·09	42·25	28·16
Dysentery	12	...	6	...	27·12	...	42·25	...
Diarrhoea	30	...	6	...	67·86	...	42·25	...
Hepatitis	24	1	11	...	54·24	2·26	77·46	...
Venereal diseases	20	...	5	...	45·24	...	35·21	...

151. The strength of the force was 584; the hospital admissions were 531; the average daily sick 22·2; and the total deaths 23: three deaths occurred out of hospital.

Strength, sickness, and mortality.

152. The ratios of sickness and mortality for 1873 are compared marginally with the results of the previous seven years. It will be observed that the daily sick have been but few, but that the mortality has been considerably higher than in any other station of the army. This was due to an outbreak of epidemic cholera, in which 12 of the effective troops died. The portion of the station occupied by the European troops always suffers from cholera epidemics, when they prevail in Burmah. A minute account of the outbreak by the medical officers of the corps will be found in Appendix (II.)

153. The causes of death were enteric fever 2, cholera 12, aneurism and heart diseases 5, apoplexy 1, abscess of liver 1, Bright's disease 1, and asphyxia from drowning 1.

154. The cholera epidemic, so fatal amongst the men, left its mark also on the families; the strength of the women was 86, and of these three died, two from the cholera epidemic. Of 173 children 14 died, and six of the deaths were from cholera. The ratios of mortality of women and children respectively were 34.8 and 80.9 per mille.

155. None.

156. The following table shows the sickness and mortality among the European and Native troops :—

						Sickness.	Per Mille Ratio of Mortality.			Invaliding.
							In Hospital.	Out of Hospital.	Total.	
<i>European Troops.</i>										
Average Strength, 584.										
Fevers	...	...	...	...	...	99.30	3.42	...	3.42	...
Dengue	...	...	...	...	...	...	...	...	...	...
Dysentery	...	...	...	...	...	30.82	...	...	...	11.99
Diarrhoea	...	...	...	...	...	61.64	...	...	...	1.71
Hepatitis...	...	...	...	...	...	59.93	1.71	...	1.71	13.69
Cholera	...	...	...	...	...	34.24	20.59	...	20.59	...
Venereal diseases	...	...	...	...	...	42.80	...	...	...	3.42
All diseases	...	...	...	...	...	909.24	34.24	5.13	39.37	82.19
<i>Native Troops.</i>										
Average Strength, 588.										
Fevers	...	...	...	...	...	124.15	...	...	...	...
Dengue	...	...	...	...	...	...	...	...	...	...
Dysentery	...	...	...	...	...	37.41	...	...	...	...
Diarrhoea	...	...	...	...	...	17.00	...	...	...	...
Hepatitis...	...	...	...	...	...	3.40	3.40	...	3.40	...
Cholera	...	...	...	...	...	1.70	1.70	1.70	3.40	...
Venereal diseases	...	...	...	...	...	13.60	...	...	...	...
All diseases	..	...	...	...	...	471.08	11.90	1.69	13.59	...

Tonghoo.

Latitude 18° 47' North. Longitude 96° 57' East.

Height above sea 300 feet.

Mean temperature 79°.

Average rainfall 69·4 inches.

Rainfall in 1873 82·85 do.

157. The European troops at this station consisted of Left Wing Her Majesty's 45th Regiment and 4-5th Brigade Royal Artillery, but at the end of the year a detachment of the 67th Regiment had relieved the 45th Wing.

—	Corps.			Ratio per 1,000 of Strength.		
	4-5th Brigade R. A.	H. M.'s 45th Regt. S. F.	H. M.'s 67th Regi- ment Left Wing.	4-5th Bri- gade R. A.	H. M.'s 45th Regt. S. F.	H. M.'s 67th Regi- ment Left Wing.
No. of weeks resident.	52	50	3			
Strength ...	79	392	178			
Total admissions ...	113	287	9	1,430·38	783·16	50·56
Daily sick ...	5·35	15·78	5·33	67·72	40·25	29·94
Died in hospital ...	...	6	...	...	15·31	...
Died out of do. ...	...	1	...	...	2·55	...
	A.	D.	A.	D.	A.	D.
Fevers ...	10	...	16	...	126·71	...
Dengue ...	...	...	...	...	...	...
Cholera ...	1	...	2	...	12·65	...
Dysentery ...	40	...	78	1	506·32	...
Diarrhoea ...	7	...	17	1	77·61	...
Hepatitis ...	21	...	55	4	265·82	...
Venereal diseases ...	15	...	44	...	189·87	...

158. The mean strength of the troops was 466 ; the hospital admissions were 409 ; the average daily sick was 20·8 ; and deaths 7. One death occurred out of hospital.

159. The ratios of sickness and mortality were below the average of the seven previous years. Epidemic cholera was prevailing for some weeks in the native town, and three cases occurred amongst the European troops. Dysentery and bowel-complaints were the most common diseases.

Comparison with previous years.			
	Admissions.	Daily Sick.	Died.
Means of 7 years ending 1873. }	1147·3	43·3	16·5
1873 ...	877·6	44·7	14·9

160. The causes of death were sunstroke one, dysentery and diarrhoea two, and abscess of liver four.

161. The strength of the women was 58, and of children 111. There were no deaths amongst the former, but of the children seven died, or in the ratio of 63·06 per mille.

162. Two new wells were built, and a large number of native huts were cleared, as, owing to their situation, it was difficult to keep the place clean.

Sanitary works.

Health of European and Native troops compared.

163. The following table shows the sickness and mortality among the European and Native troops :—

—	Sickness.	Per Mille Ratio of Mortality			Invaliding.
		In Hospital.	Out of Hospital.	Total.	
<i>European Troops.</i>					
Average Strength, 466.					
Fevers	55.78	...	...	...	...
Dengue	...	...	...	...	...
Dysentery	261.80	2.14	...	2.14	8.58
Diarrhoea	55.79	2.14	...	2.14	...
Hepatitis	163.09	8.58	...	8.58	...
Cholera	6.43	...	...	...	...
Venereal diseases	126.61	...	...	...	2.14
All diseases	877.68	12.82	2.14	14.96	23.60
<i>Native Troops.</i>					
Average Strength, 510.					
Fevers	447.05	...	...	...	...
Dengue	...	...	...	...	...
Dysentery	170.58	...	...	...	...
Diarrhoea	129.41	3.92	...	39.2	...
Hepatitis	...	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	23.52	...	...	...	...
All diseases	1,245.09	7.84	1.96	9.80	1.96

Port Blair.
(Andamans.)

The European detachment at this station was kept up by the 67th Regiment, Head-quarters at Rangoon.

164. The average strength was 102; the total admissions 40; the daily sick 0.93; and deaths two. One death occurred out of hospital.

Strength, sickness, and mortality.

Comparison with previous years.			
	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872. }	1193.5	45.2	12.8
1873...	392.1	9.1	19.6

165. The ratios of sickness and mortality are compared in the margin with the results of seven previous years. There has been a large reduction in the number of sick, but the mortality has been rather higher than the average.

166. One death occurred from aneurism of aorta, and one from accidental drowning.

Causes of death.

167. Drainage on Ross Island was extended, and the water-supply increased by enlargement of the tanks, and other minor works were executed, tending to the general improvement of the station.

Sanitary works.

Health of European
and Native troops com-
pared.

168. The following table shows the sickness and morta-
lity among the European and Native troops :—

	Sickness.	Per Mille Ratio of Mortality			Invaliding.
		In Hospital.	Out of Hospital.	Total.	
<i>European Troops.</i>					
Average Strength, 102.					
Fevers ...	58.82	...	...	...	...
Dengue ...	...	...	...	...	...
Dysentery ...	...	...	...	...	...
Diarrhoea ...	9.80	...	...	...	...
Hepatitis ...	98.04	...	...	...	...
Cholera ...	...	...	...	...	...
Venereal diseases ...	29.41	...	...	...	...
All diseases ...	392.15	9.80	9.80	19.60	...
<i>Native Troops.</i>					
Average Strength, 267.					
Fevers ...	632.95	3.74	...	3.74	...
Dengue ...	...	...	...	...	...
Dysentery ...	7.48	...	...	...	...
Diarrhoea ...	14.96	...	...	...	...
Hepatitis ...	3.74	...	...	...	...
Cholera ...	...	...	...	...	...
Venereal diseases ...	...	...	...	...	...
All diseases ...	1011.28	11.23	...	11.23	...

SECTION III.

SICKNESS AND MORTALITY AMONGST NATIVE TROOPS.

169. The strength of the Native Army on the 1st January 1873 was 31,233.

Strength by Adjutant-
General's Return.

By recruiting and other causes it received during the year an addition of 1,365 men ; and by invaliding, reduction of establishments, summary dismissals, Court-martials, deaths, and other causes it lost 1,583 men, so that the strength remaining on 31st December 1873 was 31,015, or 218 less than in the beginning of the year.

Increase and decrease.

170. The following abstract shows the particulars of the increase and decrease of the Native Army in 1873 :—

Increase.				Decrease.			
By recruits ...	...	...	1,336	By invaliding ...	...	...	963
By transfers ...	...	...	8	By summary dismissal ...	...	...	173
Joined from desertion ...	...	...	11	By Court-martial ...	...	...	54
By other causes ...	...	...	10	By desertion ...	...	...	67
				By deaths ...	...	...	308
				By other causes ...	...	...	18
Total ...			1,365	Total ...			1,583

Invaliding and deaths
according to Adjutant-
General's Returns com-
pared with former years.

171. The following abstract shows the losses of the Native Army by deaths and invaliding for a series of years :—

	Ratio per 1,000 of Strength.					
	1868.	1869.	1870.	1871.	1872.	1873.
Deaths	16.12	16.5	13.8	11.08	13.02	9.8
Invaliding	18.16	25.8	25.8	22.3	31.5	30.9

It will be seen that the death-rate has been very low in 1873.

172. The above particulars relate to the Madras Army as a whole, but some portions of the force are serving in other Presidencies, and the following particulars relate only to the army that is within the Madras command.

173. The mean strength of Native troops at stations within the Madras command was 25,900; the total admissions to hospital were 22,875; the average daily number of sick was 811.9; and 215 men died during the year. Of these deaths 167 are recorded in the Medical Returns, and 48 are described as occurring out of hospital.

While there were 215 deaths amongst the 25,900 troops in the Madras Presidency, there remain 66 deaths to be accounted for in the mean strength of 5,224 men serving in other Presidencies. The mortality, therefore, appears to have been slightly lower in the limits of the Madras command than beyond.

174. In the table below the ratios of sickness and mortality are contrasted with the results of each of the previous five years :—

	Ratio per 1,000 of Strength.					
	1868.	1869.	1870.	1871.	1872.	1873.
Admissions	707.7	702.5	630.6	693.9	1067.9	883.20
Daily sick	29.0	29.3	26.4	26.9	34.7	31.3
Deaths in hospital ...	8.6	10.1	9.4	8.8	9.9	6.4
Do. out of do.	1.4	3.6	3.6	1.8	2.4	1.8

175. The increase in the portion of hospital admissions during the last two years of the series is due to the epidemic prevalence of dengue fever. In 1872 this disease prevailed in 15 stations of the Native Army, and was the cause of 7,448 admissions. In the present year it prevailed in 13 of our military stations, and was the cause of 3,424 admissions. In some of the stations, where this epidemic prevailed in 1872, it re-appeared in 1873, but its greatest prevalence was in stations affected for the first time, or in places to which troops from unaffected localities had recently arrived.

176. There was but a single recorded case of cholera during the whole of 1873 in the stations occupied by the Native Army. This case occurred in the Burmese station of Thayetmyo when the disease was rife amongst the civil population and European troops. There was also a death out of hospital in a sepoy dwelling in Burmah. The great exemption of the Native Army from cholera is a fact without precedent, I believe,

since the year 1818. The 31st Regiment N. I., in marching from Berhampore in Ganjam, to Raepore in the Central Provinces, was attacked by cholera on the 7th February 1873, and lost in a few days 5 men and 26 camp-followers. These deaths are accounted for in the table showing sickness and mortality of troops in movement.

177. A large number of modified cases of small-pox were under treatment, namely, 308; but, as only one fatal case occurred, it is clear that the malignancy of the natural disease had been much changed by vaccination. Small-pox prevailed almost universally in the south of India during 1873, and the escape of the Native Army from heavy mortality on this occasion, such as affected the civil population, is clearly attributable to the superior degree in which the troops are protected by vaccination.

Fevers.

178. This disease prevailed chiefly in the troops stationed at Bangalore, Trichinopoly, and Seetabuldee.

Malarious fevers were rather prevalent during the latter half of the year; but, with the exception of dengue, the Native troops have been exceptionally healthy during the year.

Sickness and mortality compared with the mean of former years.

179. The following table shows the sickness and mortality of the Native Army arranged according to locality, and contrasted with the mean results of the previous seven years:—

Table showing the Strength, Sickness, and Mortality among Native Troops during 1873, arranged according to localities, contrasted with mean of previous seven years.

Locality.	Stations.	Ratio per Mille for 1873.		Mean of previous 7 years ending 1872.	
		Admitted.	Died.	Admitted.	Died.
Eastern Coast ...	Madras	836.93	6.82	664.1	10.5
	Vizagapatam	834.40	8.03	674.8	13.5
	Saint Thomas' Mount	244.44	14.81	698.8	11.05
	Palaveram (Depôt)	983.68	23.30	1707.04	51.6
	Mean ...	724.86	13.24	936.18	21.66
Western Coast ...	Mangalore	539.28	9.24	492.9	13.02
	Quilon	229.37	8.25	521.2	8.3
	Trevandrum	529.41	...	369.0	5.59
	Cannanore	240.62	3.90	386.9	7.9
	Mean ...	384.67	7.13	442.5	8.7
Plains near the sea.	Vizianagrum	1705.69	9.49	365.7	10.1
	Trichinopoly	1089.75	5.30	481.6	10.9
	Berhampore	874.31	5.46	559.5	13.9
	Vellore	552.63	7.73	705.6	21.7
	Palamcottah	1373.0	5.32	385.4	8.5
	Trichoor	372.78	...	412.5	6.5
	Cuttack	411.58	4.56	439.7	11.3
	Mean ...	768.85	6.31	478.5	11.8
Table-lands distant from the sea ...	Bellary	477.39	5.80	526.9	9.1
	Hooshungabad	804.81	10.69	778.7	11.2
	Raepore	621.06	4.71	1130.3	17.5
	Seroncha	1597.22	13.88	1380.0	11.1
	Bangalore	833.65	11.53	801.8	11.6
	Seetabuldee	2997.65	7.03	1142.6	7.8
	Secunderabad	1086.75	8.02	854.5	11.0
	French Rocks	898.10	12.08	†857.1	†13.3
	Kamptee	1158.76	13.29	924.9	9.6
	Mysore	1253.96	...	*791.9	*7.9
	Chanda	1894.73	...	1995.8	16.05
	Sumbulpore	1027.69	...	2012.8	24.04
	Mean ...	1212.64	9.69	1107.9	12.4
Hill Station ...	Mercara	1167.57	10.92	1055.2	12.9
Foreign Stations ...	Rangoon	378.53	11.53	623.6	9.6
	Port Blair	1011.23	11.23	1335.3	24.4
	Moulmein	1547.02	1.91	953.9	16.9
	Shoaygheen	1381.35	8.47	1904.7	12.1
	Tonghoo	1245.09	9.80	1031.1	16.6
	Thayetmyo	471.08	13.59	540.2	8.1
	Nicobars	7243.24	...	*6017.2	*42.1
	Akyab	464.56	7.87	...	...
	Mean ...	1717.76	9.20	1784.98	19.4

* Mean of four years.

† Mean of six years.

NATIVE TROOPS IN MOVEMENT.

180. During the year 4,140 men and 9,576 camp-followers were in movement from station to station, for periods of time varying from 17 to 72 days. The sickness and mortality on the line of march are not included in the statistical statistics of the native troops.

181. There were 260 hospital admissions, and 6 deaths amongst the Native troops in marching. The head-quarters and right wing of the 31st Native Infantry, in moving from Berhampore in the Ganjam District, to Raepore in the Central Provinces, in January and February 1873, were attacked by epidemic cholera on the 7th February while moving along the valley of the Mahanuddy river, in the neighbourhood of Sumbulpore. As this area of country is not in the Madras Presidency, I have no record of the prevalence of cholera amongst the civil population of the district but it is stated that cholera prevailed at the time amongst pilgrims returning from Pooree. There were 13 cases and 5 deaths amongst the fighting men of the regiment, and 68 cases and 26 deaths amongst the families and camp-followers. The outbreak was of short duration, and ceased before the arrival of the corps at Raepore. With this exception all the movements of Native troops were free of cholera.

182. Some very long marches were made, as in the case of the 2nd Regiment Light Cavalry from Bellary to Kamptee occupying 72 days, the 24th Regiment Native Infantry from Secunderabad to Palamcottah 54 days, without any casualties whatever, thus showing that the country traversed was generally healthy and free of epidemics.

183. The following table shows the particulars of the marches made by the various bodies of Native troops :—

Return showing Sickness and Mortality among Native Troops marching during 1873.

Regiments.	From	To	Number of Days in movement.	Strength.			Sickness and Mortality.				Cholera.			
				Commissioned and Non-commissioned Officers and Men.	Followers.		Commissioned and Non-commissioned Officers and Men.		Followers.		Commissioned and Non-commissioned Officers and Men.		Followers.	
							A.	D.			A.	D.		
L. W. 6th Regiment N. I. ...	Nagode ...	Secunderabad ...	19	307	813		5	...	47	...	...	...	...	...
Det. 10th Regiment N. I. ...	Tonghoo ...	Tonghoo ...	19	109	9		3	...	11	...	...	...	...	...
26th Regiment N. I. ...	Trichinopoly ...	Quilon ...	43	499	1,446		7	...	3	2	...	...	...	...
R. W. 2nd Regiment N. I. ...	Visagapatam ...	Berhampore ...	17	370	899		13	...	...	...	...	...	...	...
2nd Regiment L. O. ...	Bellary ...	Kamptee ...	73	246	355		19	...	...	...	...	...	...	...
Head-Quarters L. W. 22nd Regiment N. I. ...	Palamcottah ...	Hoochungabad ...	31	379	913		11	...	...	...	...	...	...	...
R. W. 22nd Regiment N. I. ...	Do. ...	Kamptee ...	44	312	581		53	...	...	...	...	...	...	...
Do. 24th do. do.	Secunderabad ...	Palamcottah ...	40	327	773		13	...	...	...	...	...	...	...
L. W. Head-Quarters 24th Regt. N. I. ...	Do. ...	Do. ...	54	385	1,116		22	...	...	...	...	...	...	...
L. W. 31st Regiment L. I. ...	Sumbulpore ...	Raepore ...	17	315	591		13	1	...	...	...	...	...	...
Head-Quarters R. W. 31st Regiment L. I. ...	Berhampore ...	Do. ...	48	374	939		79	55	68	26	13	5	68	26
R. W. 11th Regiment N. I. ...	Raepore ...	Nagode ...	29	294	780		20	...	62	3	...	...	...	...
4th Regiment L. Cavalry ...	Bellary ...	Bangalore ...	19	228	383		3	...	...	...	...	...	...	...
Det. 23rd Regiment L. O. ...	Quilon ...	Do. ...												
R. W. 40th Regiment N. I. ...	Sangor ...	Secunderabad ...												
Head-Quarters L. W. 5th Regt.	Secunderabad ...	Sangor ...												
Total ...				4,140	9,576	260	6	191	30		13	5	68	26

a. Enteritis ... 1

b. Cholera ... 5

Madras.

184. The particulars regarding the sickness and mortality of each corps are shown below :—

	Corps.					Ratio per 1,000 of Strength.				
	Body Guard.	17th Regiment Native Infantry.	7th Regiment Native Infantry.	37th Regiment Native Infantry.	13th Regiment Native Infantry.	Body Guard.	17th Regiment Native Infantry.	7th Regiment Native Infantry.	37th Regiment Native Infantry.	13th Regiment Native Infantry.
No. of weeks resident	52	52	9	52	52					
Strength ...	429	2,589	367	2,431	2,830					
Total admissions ...	101	503	32	542	526	235.43	194.28	87.19	222.95	225.75
Daily sick ...	15.88	53.39	10.85	69.08	80.69	37.01	20.62	29.56	28.41	34.63
Died in hospital ...	...	1	1	4	3	...	0.38	2.72	1.64	1.28
Died out of hospital...	2	2	...	1	...	4.66	0.77	...	0.41	...
	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.
Fevers ...	17	...	6	1	188	...	36.69	...	77.33	28.32
Dengue ...	...	...	...	...	...	...	...	...	...	81.54
Cholera ...	...	...	...	...	...	...	...	...	...	...
Dysentery ...	10	...	1	...	27	...	5.79	...	11.10	2.14
Diarrhoea ...	8	...	1	...	25	...	3.09	...	10.28	18.88
Hepatitis ...	...	...	...	...	3	...	...	...	1.23	...
Venereal diseases ...	...	25	...	...	9	...	9.65	...	3.70	8.58

185. The average strength was 2,036; the hospital admissions 1,704; the average daily sick 57·5; and deaths 14. Five deaths occurred out of hospital.

Comparison with former years.

	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872.	664·1	25·4	10·5
1873 ...	836·98	28·24	6·83

186. The ratios of sickness and mortality are compared in the margin with the results of the previous seven years. The admissions were in excess of the average, but the mortality has been very low.

187. The causes of death were fevers three, phthisis two, rheumatism one, anæmia and dropsy two, hemiplegia one, apoplexy one, heart disease one, dysentery two, and stricture of the bowel one.

Saint Thomas' Mount.

188. The detachment at this station was furnished by the 28th Regiment Native Infantry. The strength of the troops was 135; the hospital admissions 33; daily sick 0·7; and deaths 2.

189. The causes of death in the two fatal cases are recorded as phthisis one and debility one.

Comparison with former years.

	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872.	698·8	19·5	11·05
1873 ...	244·4	5·2	14·3

190. The results of the year are contrasted with the mean results of the previous seven years in the margin.

Palaveram.

191. The following table shows the number of troops, and period for which they were under observation:—

	Corps.						Ratio per 1,000 of Strength.					
	Native Infantry Depôt.		13th Regiment N. I.		39th Regiment N. I.		Native Infantry Depôt.		13th Regiment N. I.		39th Regiment N. I.	
No. of weeks resident.	52		9		41							
Strength ...	96		539		304							
Total admissions ...	207		93		132		2156·25		172·54		434·21	
Daily sick ...	15·73		20·73		6·39		163·85		38·46		21·01	
Died in hospital ...	7		...		...		72·91		...		...	
Do. out of do. ...	...		2		1		...		3·71		3·28	
	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.
Fevers ...	35	...	21	...	15	...	364·58	...	38·96	...	49·34	...
Dengue ...	3	...	10	...	...	...	52·08	...	18·55	...	...	...
Cholera ...	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery ...	8	1	2	...	4	...	83·33	10·41	3·71	...	13·15	...
Diarrhoea ...	19	1	2	...	2	...	197·91	10·41	3·71	...	6·57	...
Hepatitis ...	...	...	...	...	1	...	...	...	...	...	3·28	...
Venereal diseases ...	6	...	8	...	7	...	62·5	...	14·84	...	23·02	...

Strength, sickness,
and mortality.

192. The strength was 429; the total admissions 422; average daily sick 24·3; and deaths 10. Three deaths occurred out of hospital.

Comparison with former years.

	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872.	1707·04	156·6	51·6
1873 ...	983·68	56·78	23·3

stations across the sea.

193. The ratios of admissions and mortality are contrasted in the margin with the results of previous years. Seven of the ten deaths at this station occurred in the Native Infantry Dépôt, which receives invalids from Burmah and other

Causes of death.

194. The causes of death are given as phthisis two, rheumatism one, bowel-complaints three, Bright's disease one, and general debility three.

Sanitary works.

195. The station is maintained in good order. No special works during the year.

Vellore.

Latitude 12° 55' North. Longitude 79° 12' East.

Height above sea 675 feet.

Mean temperature ?

Average rainfall 44 inches.

Rainfall in 1873 34·60 inches.

196. The 28th Regiment Native Infantry occupied the station for the whole year.

The strength of the troops was 646; the total admissions 357; the daily Strength, sickness, sick 12·31; and deaths 5, one of which occurred out of and mortality. hospital.

Comparison with former years.

	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872.	705·6	33·7	21·7
1873 ...	552·63	19·05	7·7

197. The ratios of sickness and mortality were lower than usual as shown in the margin.

Causes of death.

198. The deaths resulted from fever one, phthisis two, caries one, and unknown one.

199. The huts of the regiment have, in a great measure, been rebuilt during the year. The conservancy of the station is under municipal Sanitary works. control. The following table contrasts the sickness of the troops and prisoners in jail :—

—	Sickness.	Per Mille Ratio of Mortality			Invaliding.
		In Hospital.	Out of Hospital.	Total.	
<i>Native Troops.</i>					
Average Strength, 646.					
Fevers	185.76	1.54	...	1.54	...
Dengue	...	...	...	...	...
Dysentery	18.93	...	...	...	...
Diarrhoea	21.67	...	...	...	...
Hepatitis	...	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	17.03	...	...	...	...
All diseases	552.63	6.19	1.54	7.73	83.59
<i>Prisoners.</i>					
Average Strength, 951.					
Fevers	197.68	...	...	...	...
Dengue	...	...	...	...	...
Dysentery	28.39	2.10	...	2.10	...
Diarrhoea	41.00	...	...	...	...
Hepatitis	...	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	5.25	...	...	...	...
All diseases	689.80	9.46	...	9.46	...

Vizagapatam.

200. The 7th Regiment N. I. was at Waltair for a portion of the year.

Composition of force.

The mean annual strength was 622; the hospital admissions 519; the daily sick 34.2; and deaths 5.

Comparison with former years.

	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872..	674.8	35.4	13.5
1873 ..	834.40	55.06	8.03

201. The sick list was higher than ordinary as will be seen in the margin. Dengue prevailed to some extent amongst the new comers.

Causes of death.

202. The deaths were due to phthisis one, anæmia one, leprosy one, beri-beri one, and tetanus one.

Sanitary condition.

203. The station is kept clean and in fair sanitary condition.

Sanitary works.

204. Several new drains were constructed and wells dug during the year.

Health of troops and prisoners compared.

205. The following table contrasts the mortality of the troops and prisoners during the year :—

	Sickness.	Per Mille Ratio of Mortality			Invaliding.
		In Hospi- tal.	Out of Hospital.	Total.	
<i>European Troops.</i>					
Average Strength, 66.					
Fevers	15.15	...	..	...	...
Dengue	...	...	...	...	...
Dysentery	...	...	...	...	...
Diarrhoea	45.45	...	...	...	...
Hepatitis	...	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	75.75	...	...	...	...
All diseases	590.91	30.30	...	30.30	...
<i>Native Troops.</i>					
Average Strength, 622.					
Fevers	136.65	...	...	...	...
Dengue	12.86	...	...	...	...
Dysentery	32.15	...	...	...	...
Diarrhoea	8.03	...	...	...	...
Hepatitis	...	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	14.47	...	...	...	...
All diseases	834.40	8.03	...	8.03	...
<i>Prisoners.</i>					
Average Strength, 267.					
Fevers	48.68	...	...	...	...
Dengue	...	...	...	...	...
Dysentery	22.47	3.74	...	3.74	...
Diarrhoea	78.65	26.21	...	26.21	...
Hepatitis	...	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	7.49	3.74	...	3.74	...
All diseases	262.17	59.92	...	59.92	...

Vizianagram.

Latitude 18° 2' North. Longitude 18° 32' East.

Height above sea?

Mean temperature?

Average rainfall 42.9 inches.

Rainfall in 1873?

206. The 12th Regiment N. I. remained here throughout the year.

Strength, sickness, and mortality. The strength of the troops was 632; the hospital admissions numbered 1,078; the daily sick 40.9; and deaths 6. One death occurred out of hospital.

Comparison with former years.

	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872...	365.7	18.9	10.1
1873 ..	1705.69	64.77	9.49

207. The ratio of sickness was much in excess of the average of this station, as will be apparent from the marginal table. This was mainly the result of an epidemic of dengue (369 cases) ague, and skin diseases.

Causes of death.

208. The causes of death were ague three, heart disease one, hepatitis one, and debility one.

Berhampore.

Latitude 19°20' North. Longitude 84°5' East.

Height above sea 112 feet.

Average rainfall 48·86 inches.

Rainfall in 1873 28·35 do.

209. The Right Wing of the 2nd Regiment N. I. occupied the station for 51 weeks of the year.

Strength, sickness, and mortality.

210. The strength of the troops was 366; the hospital admissions 320; the average daily sick 8·5; and deaths 2.

Comparison with former years.

	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1873...	559·5	26·9	18·9
1873 ...	874·31	28·2	25·46

211. The ratios of sickness and mortality are compared in the margin with the results of the previous seven years.

Causes of death.

212. The causes of death in the two fatal cases were phthisis and dysentery.

Sanitary works.

213. The town of Berhampore is under municipal control, and is being drained.

Health of troops and prisoners compared.

214. The following table contrasts the health of Native troops and of the prisoners in jail. The latter had no dengue, but suffered more from diarrhoea than the troops :—

					Sickness.	Per Mille Ratio of Mortality			Invaliding.
						In Hospi- tal.	Out of Hospital.	Total.	
<i>Native Troops.</i>									
Average Strength, 366.									
Fevers	...	...	...	...	278·69	...	...	...	...
Dengue	...	...	...	...	60·10	...	...	...	...
Dysentery	...	...	...	...	8·19	2·73	...	2·73	...
Diarrhoea	...	...	...	...	38·25	...	...	...	...
Hepatitis	...	...	...	...	2·73	...	...	...	...
Cholera	...	...	...	...	...	...	...	...	...
Venereal diseases	...	...	...	...	19·12	...	...	...	...
All diseases	...	...	...	...	874·31	5·46	...	5·46	...
<i>Prisoners.</i>									
Average Strength, 132.									
Fevers	...	...	...	...	295·45	...	...	...	...
Dengue	...	...	...	...	...	...	...	...	...
Dysentery	...	...	...	...	37·87	...	...	...	...
Diarrhoea	...	...	...	...	219·69	45·45	...	45·45	...
Hepatitis	...	...	...	...	...	...	...	...	...
Cholera	...	...	...	...	...	...	...	...	...
Venereal diseases	...	...	...	...	22·72	7·57	...	7·57	...
All diseases	...	...	...	...	825·75	75·75	...	75·75	...

Cuttack.

215. This station was occupied by the 41st Regiment Native Infantry for the whole of 1873.

216. The strength of the troops was 656; the total admissions 270; the daily sick 18·17; and deaths 3. Two deaths occurred out of hospital.

Strength, sickness, and mortality.

Comparison with former years.			
	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872.	439.7	27.7	11.3
1873	411.58	27.69	4.56

217. The ratios of sickness and mortality are compared in the margin with the results of the previous seven years.

218. The causes of death were meningitis one, and unknown (died out of hospital) two.

219. None.

Sumbulpore.

Latitude? Longitude?

Height above sea?

Mean temperature?

Average rainfall 54.37 inches.

Rainfall in 1873 55.7 do.

220. This station was occupied by the Left Wing 31st Regiment Native Infantry for five weeks, and Left Wing of the 2nd Regiment Native Infantry for 47 weeks of the year.

The average strength of the troops was 325; the hospital admissions were 334; the daily sick 11.9; and deaths none.

Comparison with former years.			
	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872	2012.8	42.4	24.04
1873	1027.6	36.8	...

221. There has been a great diminution of sickness in the force at this station, as will be seen in the contrasted results entered in the margin.

Malarious fevers were formerly very prevalent at this station, but have been diminishing in frequency for the last two or three years.

222. A latrine on the dry earth system for the new hospital was finished during the year.

Bangalore.

223. The Native troops at Bangalore are shown in the following table:—

	Corps.					Ratio per 1,000 of Strength.									
	Garrison.	39th Regiment N. I.	Head-Quarters Sappers and Miners.	36th Regiment N. I.	Head-Quarters 23rd Regiment N. I.	Garrison.	30th Regiment N. I.	Head-Quarters Sappers and Miners.	36th Regiment N. I.	Head-Quarters 23rd Regiment N. I.	Garrison.	30th Regiment N. I.	Head-Quarters Sappers and Miners.	36th Regiment N. I.	Head-Quarters 23rd Regiment N. I.
No. of weeks resident ...	52	11	52	52	52										
Strength ...	20	409	687	638	648										
Total admissions ...	8	87	670	496	473	400	212.71	975.25	777.42	729.93					
Daily sick ...	0.39	11.85	16.47	21.59	14.51	19.5	28.97	23.97	83.84	22.39					
Died in hospital ...	1	...	3	6	9	50.0	...	4.36	9.40	13.88					
Died out of do. ...	1	...	8	...	1	50.0	...	4.36	...	1.54					
	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.
Fevers ...	...	...	15	...	79	...	126	4	117	...	36.67	...	114.99	...	180.55
Dengue ...	...	...	2	...	331	1	5	...	5	...	4.88	...	481.80	1.45	7.71
Cholera ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery ...	...	1	1	...	7	...	7	...	16	150.50	2.44	...	10.18	...	24.69
Diarrhoea ...	...	...	...	...	...	18	...	9	...	...	...	...	28.21	...	13.88
Hepatitis ...	...	...	...	...	8	...	2	...	1	...	...	...	4.36	...	1.54
Venereal diseases ...	...	...	3	...	12	...	14	...	7	...	7.33	...	17.46	...	10.80

Strength, sickness,
and mortality.

224. The strength was 2,080; the hospital admissions 1,734; the daily sick 55·4; and deaths 24. Five deaths occurred out of hospital.

Comparison with former years.			
	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1873 ...	801·8	29·2	11·6
1873 ...	833·6	26·6	11·5

225. The proportions of sickness and mortality have been very nearly the same as the mean of the previous seven years, as shown in the margin.

A large number of admissions from dengue fever occurred in the headquarters of the Sappers and Miners, but hardly any in the other corps.

226. The causes of death were fevers seven, phthisis two, apoplexy one, heart disease one, bronchitis one, pneumonia and asthma five, dysentery two, burn one, debility one, suicide two, and neuralgia one.

227. The construction of new lines for the Native Infantry Regiments has been progressing throughout the year. The new houses will be a great improvement on the old; and the drainage of the lines has received special attention.

French Rocks.

Latitude 12° 39' North. Longitude 76° 50' East.

Height above sea 3,300 feet.

Mean temperature?

Average rainfall?

Rainfall in 1873?

Strength, sickness,
and mortality.

228. This station was occupied by the head-quarters of the 30th Regiment Native Infantry throughout the year.

229. The average strength of the troops was 579; the total admissions were 520; the daily sick were 10·3; and deaths 7.

The admissions were mainly due to malarious fevers and dengue.

Comparison with former years.			
	Admissions.	Daily Sick.	Died.
Mean of 6 years ending 1873 ...	857·1	33·7	13·8
1873 ...	898·1	17·8	12·08

230. The ratios of sickness and mortality are contrasted marginally with the results of previous years.

Causes of death.

231. The causes of death were ague one, enteric fever one, phthisis one, beri-beri one, epilepsy one, dysentery one, and diarrhoea one.

Sanitary works.

232. None.

Mysore.

Latitude 12° 8' North. Longitude 76° 42' East.

Height above sea 2,450 feet.

Mean temperature 76°.

Average rainfall 30·5 inches.

Rainfall in 1873 21·63 do.

Strength, sickness,
and mortality.

233. A detachment from the 30th Regiment Native Infantry garrisoned the station throughout the year.

234. The strength was 63; the hospital admissions 79; and average daily sick 1·3: no death occurred.

Strength,
and mortality.

240. The strength of the troops averaged 1,548 men ; the hospital admissions were 739 ; the daily sick 31·2 ; and deaths 9. Four of the deaths were out-of-hospital casualties.

Comparison with former years.

	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872.	426·9	20·4	9·1
1873 ...	477·3	20·2	5·8

241. The ratios of sickness and mortality when contrasted with the mean results of the previous seven years are favorable, as shown in the margin.

Causes of death.

242. The causes of death in the fatal cases were fever one, phthisis four, beri-beri one, heart disease one, hepatitis one, and drowning one.

Trichinopoly.

Composition of force.

243. The composition of the Native force is shown below :—

—	Corps.				Ratio per 1,000 of Strength.											
	Garrison.	38th Regiment N.I.	19th Regiment N. I.	Hd.-Qrs. and Wing 32nd Regiment N.I.	Garrison.	38th Regiment N. I.	19th Regiment N. I.	Hd.-Qrs. and Wing 32nd Regiment N. I.								
No. of weeks resident ...	52	52	52	47												
Strength ...	47	649	664	602												
Total admissions ...	3	423	679	947	63.82	651.77	1,022.59	1,573.08								
Daily sick ...	0.28	12.46	18.21	19.33	5.95	19.19	27.42	32.10								
Died in hospital ...	...	4	1	2	...	6.16	1.50	3.32								
Died out of do. ...	...	3	...	...	...	4.62	...	...								
	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.
Fevers ...	...	...	141	...	187	...	122	1	...	...	217.25	...	281.62	...	202.65	1.66
Dengue ...	...	...	...	...	56	...	579	1	...	...	...	...	84.83	...	961.79	1.66
Cholera ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery ...	...	...	16	...	19	...	24	...	...	...	23.65	...	28.61	...	39.86	...
Diarrhoea ...	1	...	23	1	10	1	18	...	21.27	...	35.48	1.54	15.06	1.59	29.90	...
Hepatitis ...	...	...	2	...	...	...	...	...	...	...	3.08	...	...	...	...	...
Venereal diseases ...	...	...	10	...	17	...	5	...	...	...	15.40	...	25.60	...	3.30	...

Strength,
and mortality.

244. The mean strength of the troops was 1,883 ; the hospital admissions were 2,052 ; the average daily sick 48·4 ; and deaths 10. Three of the casualties occurred out of hospital.

245. The ratios of sickness and mortality are contrasted in the margin with the results of previous years. The mortality in 1873 has been very low, but the admissions have been more numerous than usual owing to dengue attacking a newly-arrived corps (23rd Native Infantry) and sending 579 men into hospital for that cause alone.

Comparison with former years.

	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872...	481·6	16·02	10·9
1873 ...	1089·7	25·7	5·3

Causes of death.

246. The causes of death as reported were ague one, dengue fever one, paralysis one, heart disease two, diarrhoea three, and debility two.

Quilon.

Latitude 80° 53' North. Longitude 76° 39' East.
 Height above sea a few feet.
 Mean temperature 81°.
 Average rainfall 80·1 inches.
 Rainfall in 1873 104·65 do.

Strength, sickness, and mortality. 247. The 23rd Regiment L. I. was relieved in the beginning of the year by the 26th Regiment N. I.

The mean strength of the troops was 606 ; the total admissions were 139 ; the average daily sick 5·69 ; and deaths 5.

Comparison with former years.			
	Admissions.	Daily Sick.	Died
Mean of 7 years ending 1872 ...	521·2	23·3	8·3
1873 ...	229·3	9·3	8·2

248. The ratios of sickness and mortality are contrasted in the margin with the results of the previous seven years, and it will be observed that the past year has been on the whole a favorable one for health.

Causes of death. 249. The causes of death were phthisis one, pericarditis one, hydrothorax one, fistula in ano one, and abscess one.

Sanitary works. 250. None.

Trichoor.

Latitude 10° 33' North. Longitude 76° 16' East.
 Height above sea ?
 Mean temperature ?
 Average rainfall ?
 Rainfall in 1873 ?

Strength, sickness, and mortality. 251. This station was occupied by a detachment of the 26th Regiment N. I.

The average strength of the troops was 169 ; the total admissions were 63 ; and daily sick 2·8. No deaths occurred.

Sanitary works. 252. None of importance.

Trevandrum.

Latitude 8° 30' North. Longitude 71° East.
 Height above sea ?
 Mean temperature ?
 Average rainfall ?
 Rainfall in 1873 ?

Strength, sickness, and mortality. 253. Detachments from the 23rd, 24th, and 26th Regiments N. I. garrisoned the station during the year.

The mean strength of the detachment was 85 ; the hospital admissions were 45 ; average daily sick 1·1. No deaths occurred.

Palamecottah.

Latitude 90° North. Longitude 78° East.

Height above sea 120 feet.

Mean temperature ?

Average rainfall 23 inches.

Rainfall in 1873 ?

254. This station was occupied for the first six weeks of the year by a portion of the 22nd Regiment N.I., and for 47 weeks by the 24th Regiment N. I.

The mean strength of the troops was 563 ; the hospital admissions were 773 ; the daily sick 17·5 ; and deaths 3.

Comparison with former years.			
	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872 ...	385·4	15·2	8·5
1873 ...	1373·0	31·2	5·8

255. The ratios of sickness and mortality are contrasted in the margin with the results of the previous seven years.

The admissions have been more numerous than usual, owing to an outbreak of dengue fever, which caused 554 of the total admissions to hospital.

256. The causes of death were phthisis one, obstruction of the bowels one, and debility one.

The following table shows the comparative sickness and mortality of the troops and prisoners :—

—					Sickness.	Per Mille Ratio of Mortality			Invaliding.
						In Hospital.	Out of Hospital.	Total.	
Native Troops.									
Average Strength, 563.									
Fevers	...	...	...	...	76·37	...	...	...	...
Dengue	...	...	...	...	984·01	...	...	...	...
Dysentery	...	...	...	...	28·41	...	...	...	...
Diarrhoea	...	...	...	...	8·88	...	...	...	...
Hepatitis	...	...	...	...	3·55	...	...	...	...
Cholera	...	...	...	...	...	...	...	...	...
Venereal diseases	...	...	...	...	12·43	...	...	...	...
All diseases	...	...	...	...	1,373·00	5·32	...	5·32	...
Prisoners.									
Average Strength, 249.									
Fevers	...	...	...	...	24·09	4·01	...	4·01	...
Dengue	...	...	...	...	...	...	...	...	...
Dysentery	...	...	...	...	40·16	8·03	...	8·03	...
Diarrhoea	...	...	...	...	8·03	4·01	...	4·01	...
Hepatitis	...	...	...	...	...	...	...	...	...
Cholera	...	...	...	...	...	...	...	...	...
Venereal diseases	...	...	...	...	24·09	...	...	...	...
All diseases	...	...	...	...	265·06	24·09	...	24·09	...

Cannanore.

257. The troops occupying this station are shown below :—

—	Corps.			Ratio per 1,000 of Strength.		
	Garrison.	25th Regiment N. I.	9th Regiment N. I.	Garrison.	25th Regiment N. I.	9th Regiment N. I.
No. of weeks resident	52	52	52			
Strength	1	639	640			
Total admissions	...	198	110	...	309.85	171.87
Daily sick... ..	...	6.44	5.16	...	10.07	8.06
Died in hospital	...	...	1	...	...	1.56
Died out of do.	...	...	4	...	...	6.25

	A. D.		A. D.		A. D.		A. D.		A. D.		A. D.	
	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.
Fevers	...	...	27	...	12	...	...	...	42.25	...	18.75	...
Dengue	...	...	...	...	...	...	...	...	...	...	...	...
Cholera	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery	...	...	6	...	8	...	...	...	9.38	...	12.50	...
Diarrhoea	...	...	...	...	...	...	...	...	...	...	...	...
Hepatitis	...	...	...	...	...	...	...	...	...	...	...	...
Venereal diseases	...	...	2	...	8	...	...	...	3.12	...	12.50	...

258. The average strength of the force was 1,280 ; the hospital admissions were 308 ; the average daily sick 11.60 ; and deaths 5. Four deaths occurred out of hospital.

259. The proportions of sickness and mortality are contrasted in the margin with the results of previous years, and it will be observed that the average low rates of this station have been in excess of the results for 1873.

Comparison with former years.			
Admissions. Daily Sick. Died.			
Mean of 7 years ending 1872.)	386.9	16.3	7.9
1873 ...	240.6	9.06	3.9

260. The causes of death were phthisis two, debility one, dyspepsia one, and unknown one.

Mangalore.

Latitude 12° 50' North. Longitude 70° 4' East.
Height above sea 40 feet.
Mean temperature ?
Average rainfall 150 inches.
Rainfall in 1873 116 do.

261. The 34th Regiment Native Infantry occupied the station throughout the year.

The average strength of the corps was 649 ; the hospital admissions were 350 ; the average daily sick 11.4 ; and deaths 6. Two of the latter occurred out of hospital.

Comparison with former years.			
	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872.	492.9	19.2	13.02
1873 ...	539.2	16.1	9.2

262. The mortality has been below the average, and the admissions slightly in excess, as will appear from the abstract in the margin.

Causes of death.

263. The causes of death were phthisis one, rupture of the heart one, dysentery two, gastritis one, and Bright's disease one.

Sanitary works.

264. None.

265. The following table shows the sickness and mortality among the Native troops and prisoners :—

—	Sickness.	Per Mille Ratio of Mortality.			Invaliding.
		In Hospital.	Out of Hospital.	Total.	
<i>Native Troops.</i>					
Average Strength, 649.					
Fevers	137.12	...	...	...	...
Dengue	...	...	...	...	...
Dysentery	35.44	1.54	1.54	3.08	...
Diarrhoea	26.19	...	...	...	...
Hepatitis	8.08	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	7.70	...	...	...	...
All diseases	539.28	6.16	3.08	9.24	27.78
<i>Prisoners.</i>					
Average Strength, 119.					
Fevers	403.36	...	...	...	...
Dengue	...	...	...	...	...
Dysentery	100.84	8.40	...	8.40	...
Diarrhoea	100.84	...	...	...	...
Hepatitis	...	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	84.03	...	...	...	...
All diseases	1,596.63	16.80	...	16.80	...

Secunderabad.

Composition of force.

266. The number of corps, and sickness and mortality in each, are shown in the following table :—

Corps.										Ratio per 1,000 of Strength.									
		Garrison.		D, G, and H Companies, Sappers and Miners.		3rd Regiment Light Infantry.		29th Regiment Native Infantry.		Head-Quarters & Left Wing, 40th Regiment Native Infantry.		Head-Quarters & Right Wing, 6th Regiment Native Infantry.		1st Regiment Light Cavalry.					
		52		52		52		52		52		52		52		47			
No. of weeks resident	..	52		52		52		52		52		52		52		47			
Strength	...	30		318		693		678		655		658		238					
Total admissions	...	10		667		1,131		411		748		424		129					
Daily sick	...	0.59		26.59		33.59		17.75		22.24		16.00		5.14					
Died in hospital	...	1		...		4		2		9		4		...					
Died out of do	...	...		...		4		...		2		...		...					
		A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.		
Fevers	...	4	341	724	1222	374	2148	160	133.33	1072.32	1044.73	327.43	570.99	224.92	252.10	...	...		
Dengue	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Cholera	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Dysentery	...	...	7	17	10	11	6	...	...	22.01	24.53	14.74	16.79	9.11	...	...	...		
Diarrhoea	...	...	9	7	7	19	14	6	...	28.30	10.10	10.32	29.00	21.27	25.21	...	...		
Hepatitis	...	...	3	1	1	1	...	1	...	9.43	1.44	1.47	1.52	...	4.20	...	...		
Venereal diseases	...	...	6	11	16	3	4	3	...	18.86	15.87	23.59	4.58	6.07	12.60	...	...		

267. The average strength of the Native force was 3,239; the total hospital admissions 3,520; the average daily sick 122; and deaths 26. Six of the deaths occurred out of hospital.

Comparison with former years.

	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872.	854.5	32.8	11.0
1873 ...	1066.7	37.6	8.0

268. Malarious fevers were rather common amongst the Native troops, and the hospital admissions were more numerous than usual, but the mortality was less, as will be seen from the marginal table.

269. The causes of death were fevers six, phthisis six, dropsies two, heart disease one, lung diseases three, diarrhoea one, jaundice one, hepatitis one, hæmorrhoids one, debility two, and drowning two.

Kamptee.

270. The composition of the force, and the sickness and mortality in each corps, are shown in the following table:—

	Corps.					Ratio per 1,000 of Strength.														
	Garrison.	35th Regiment N. I.	32nd Regt-ment N. I.	2nd Regiment L. C.	R. W., 32nd Regiment N. I.	Garrison.	35th Regiment N. I.	32nd Regi-ment N. I.	2nd Regiment L. C.	L. W., 22nd Regiment N. I.										
No. of weeks resident ...	52	52	11	46	40															
Strength ...	10	691	316	232	299															
Total admissions.	11	739	36	332	286	1,100	1,054.99	113.92	1,431.03	956.52										
Daily sick ...	0.86	24.61	7.96	12.24	6.75	86	85.61	25.18	52.75	22.57										
Died in hospital.	1	10	...	2	...	100	14.47	...	8.62	...										
Died out of do.	...	2	...	...	1	...	2.89	...	...	3.34										
	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.				
Fevers ...	2	...	140	1	16	...	75	...	123	...	260	...	202.60	1.44	50.63	...	323.27	...	41.37	...
Dengue...	2	...	325	1	...	...	188	...	37	...	200	...	4703.32	1.44	...	...	810.24	...	123.74	...
Chol er...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery	...	...	12	...	...	...	2	...	1	...	...	...	17.86	...	...	...	8.62	...	3.34	...
Diarrhoea	...	...	4	1	2	...	1	...	8	...	...	...	5.78	1.44	6.32	...	4.81	...	26.75	...
Hepatitis	...	...	4	...	...	...	...	...	...	...	...	...	5.78	...	...	...	...	...	...	...
Venereal diseases	...	...	10	...	...	...	1	...	1	...	...	...	14.47	...	...	...	4.81	...	3.34	...

271. The mean strength of the force was 1,203; the hospital admissions numbered 1,394; the daily sick 43; and deaths 16. Three deaths occurred out of hospital.

Comparison with former years.

	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1873 ...	924.9	30.8	9.6
1873 ...	1158.7	35.8	13.2

272. The ratios of sickness and mortality are contrasted in the margin with the results of the previous seven years. During 1873 dengue fever was very prevalent in the station, and the excess of sickness in that year was mainly due to this epidemic.

273. The causes of death were fevers two, anæmia one, pyæmia one, beri-beri two, heart disease two, pneumonia two, asthma one, diarrhoea one, ulcer of stomach one, general debility one, and congestion of lungs two.

Seetabuldee.

Strength, sickness, and mortality.

274. The head-quarters of the 20th Regiment Native Infantry occupied the station for 49 weeks of the year.

The strength of the troops was 426 ; the hospital admissions reached the high number of 1,277 ; the daily sick averaged 56·5 ; and 3 men died. Two of the deaths occurred out of hospital.

The excessive sickness during the year at this station was due to dengue fever.

There were 588 admissions from this cause, so that every man of the corps must have been in hospital, and in some cases more than once. Ague was also very prevalent.

Comparison with former years.

	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872. }	1142·6	28·8	87
1873 ...	2997·6	132·7	7·03

275. The sickness and mortality are contrasted in the margin with the results of previous years.

Causes of death.

276. The causes of death were small-pox one, phthisis one, and unknown one.

Hooshungabad.

Latitude 22° 43' North. Longitude 77° 45' East.
Height above sea ?
Mean temperature ?
Average rainfall 60·5 inches.
Rainfall in 1873 41·5 do.

Composition of force.

277. The composition of the force is shown in the following table :—

	Corps.				Ratio per 1,100 of Strength.			
	Head-Quarters and Wing 32nd Regiment N. I.		Head-Quarters and Wing 22nd Regiment N. I.		Head-Quarters and Wing 32nd Regiment N. I.		Head-Quarters and Wing 22nd Regiment N. I.	
No. of weeks resident ...	3		49					
Strength ...	368		374					
Total admissions ...	10		291		27·17		778·07	
Daily sick ...	7·99		8·88		21·71		23·74	
Died in hospital ...	...		3		...		8·02	
Died out of do. ...	...		1		...		2·67	
	A.	D.	A.	D.	A.	D.	A.	D.
	6	...	192	1	16·30	...	513·36	2·67
	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...
	...	...	2	...	...	...	5·34	...
	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...
Fevers ...	6	...	192	1	16·30	...	513·36	2·67
Dengue ...	...	...	...	...	...	...	...	...
Cholera ...	...	...	...	...	...	...	...	...
Dysentery ...	...	...	2	...	...	...	5·34	...
Diarrhœa ...	...	...	...	...	...	...	...	...
Hepatitis ...	...	...	...	...	...	...	...	...
Venereal diseases ...	...	...	1	...	...	...	2·67	...

278. The strength of the troops was 374 ; the hospital admissions were 301 ; the daily sick 8·8 ; and deaths 4. One of the latter occurred out of hospital.

Comparison with former years.			
	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872.	778·7	26·5	11·2
1873 ...	804·8	23·6	10·6

279. The proportions of sickness and mortality do not differ materially from the mean of the previous seven years, as will be seen in the marginal abstract.

280. The causes of death were fever one, heart disease one, fracture of skull one, and debility one.

Sanitary works. 281. None.

Raepore.

Latitude 21° 15' North. Longitude 81° 41' East.

Height above sea ?

Mean temperature ?

Average rainfall 45 inches.

Rainfall in 1873 34·48 do.

282. The station was occupied by the 11th and 31st Regiments for the periods shown below :—

	Corps.				Ratio per 1,000 of Strength.			
	11th Regiment N. I.		Head-Quarters, 31st Regiment N. I.		11th Regiment N. I.		Head-Quarters, 31st Regiment N. I.	
No. of weeks resident ...	10		44					
Total admissions...	290		686					
Strength ...	16		379		55·17		552·47	
Daily sick ...	13·82		12·67		47·65		18·46	
Died in hospital ...	...		3		...		4·37	
Died out of do. ...	...		...		...		...	
	A.	D.	A.	D.	A.	D.	A.	D.
Fevers ...	7	...	177	...	24·13	...	258·01	...
Dengue ...	...	...	...	...	...	...	...	...
Cholera ...	...	...	...	...	...	...	...	...
Dysentery ...	...	...	21	1	...	...	30·61	1·45
Diarrhoea ...	1	...	5	...	3·44	...	7·28	...
Hepatitis ...	...	...	...	...	...	...	...	...
Venereal diseases ...	...	...	7	...	...	...	10·20	...

283. The strength of the troops was 636 ; the total admissions were 395 ; the daily sick 13·3 ; and deaths 3.

Comparison with former years.			
	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872.	1130·3	39·02	17·5
1873 ...	621·06	21·03	4·7

284. The sickness and mortality were much below the average as will be seen from the marginal table.

285. The causes of death were dysentery one, debility one, and burn one.

Sanitary works. 286. None.

Chanda.

Latitude 19° 56' North. Longitude 79° 20' East.

Height above sea ?

Mean temperature ?

Average rainfall 44 inches.

Rainfall in 1873 38·33 do.

Strength, sickness, and mortality. 287. Detachments of the 8th and 30th Regiments N. I. garrisoned the station during the year.

The strength of the troops was 76; the hospital admissions 144; and the daily sick 3·2. There was no death.

Comparison with former years.			
	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872.	1995·8	57·7	16·05
1873 ... 1894·7	42·5	...	...

288. The admissions were mainly due to malarious fevers, and the sickness was rather below the average of the previous seven years.

Sanitary works.

289. None.

Seroncha.

Latitude 18° 51' North. Longitude 80° 2' East.

Height above sea ?

Mean temperature ?

Average rainfall 41 inches.

Rainfall in 1873 33·36 do.

Strength, sickness, and mortality. 290. A detachment of the 20th Regiment N. I. occupied the station for the whole of the year.

The mean strength of the troops was 144; there were 230 admissions into hospital; daily sick 5·19; and 2 deaths.

Comparison with former years.			
	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872...	1380·0	38·8	11·1
1873 ... 1897·3	36·04	13·8	...

291. The proportions of sickness and mortality were rather higher than the mean of seven years previous, as will be seen in the marginal table.

Causes of death.

292. The causes of death were dysentery one and anæmia one.

Sanitary works.

293. None.

Rangoon.

Composition of force. 294. The composition of the Native force at this station is shown below :—

—	Corps.			Ratio per 1,000 of Strength.								
	Garrison.	14th Regiment N. I.	B Company, Sappers and Miners.	Garrison.	14th Regiment N. I.	B Company, Sappers and Miners.						
No. of weeks resident.	52	52	52									
Strength ...	958	658	117									
Total admissions ...	180	409	67	187.69	621.58	572.64						
Daily sick ...	11.75	21.81	36.97	12.26	33.14	56.18						
Died in hospital ...	8	10	...	8.35	15.19	...						
Died out of do. ...	...	2	...	...	3.039	...						
	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.
Fevers ...	31	1	57	1	15	...	32.35	1.04	86.62	1.51	128.20	...
Dengue ...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera ...	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery ...	12	...	26	...	6	...	12.52	...	39.51	...	51.28	...
Diarrhoea ...	5	1	47	2	2	...	5.21	1.04	71.42	3.03	17.09	...
Hepatitis ...	...	...	...	...	...	...	...	...	...	...	...	...
Veneral diseases ...	6	...	18	...	4	...	6.26	...	27.35	...	34.18	...

295. The mean strength of the troops included in this return was 1,733 ; the hospital admissions 656 ; the daily sick 36.9 ; and deaths 20. Two deaths occurred out of hospital.

Comparison with former years.			
Admissions. Daily Sick. Died.			
Mean of 7 years ending 1872...	622.6	33.2	9.6
1873 ...	878.6	21.8	11.5

296. The proportions of sickness and mortality are contrasted in the margin with the results of previous years. The hospital admissions were fewer than usual, though the mortality was slightly in excess.

297. The causes of death were fevers two, rheumatism one, anæmia one, dropsy four, heart disease one, bronchitis two, diarrhoea three, colic one, debility four, and drowning one.

Thayetmyo.

298. The 1st Regiment N. I. occupied the station throughout the year. The strength of the troops was 588 ; the hospital admissions 277 ; the daily sick 11.7 ; and deaths 8. One death occurred out of hospital.

Comparison with former years.			
Admissions. Daily Sick. Died.			
Mean of 7 years ending 1872...	540.2	21.6	8.1
1873 ...	471.08	19.89	13.5

Causes of death.

299. The proportions of sickness and mortality are contrasted with the results of the previous seven years, and it will be seen that, while the sickness has been somewhat below the average, the mortality has been higher. Epidemic cholera prevailed in the station, but only two men died of it.

300. The causes of death were cholera two, heart disease two, hepatic diseases two, and debility two.

Tonghoo.

Strength, sickness, and mortality. 301. The 10th Regiment N. I. occupied the station throughout the year.

302. The strength of the troops was 510 ; the hospital admissions 635 ; the average daily sick 22·5 ; and deaths 5. One death took place out of hospital.

Comparison with former years. Admissions. Daily Sick. Died. 303. The proportions of sickness and mortality are contrasted in the margin with the results of previous years. The admissions in 1873 were in excess, and the mortality below the average.

Causes of death. 304. The causes of death were anæmia one, epilepsy one, aneurism of aorta one, and diarrhoea two.

Moulmein.

Latitude 16° 30' North. Longitude 97° 30' East.
Height above sea ?
Mean temperature 79°
Average rainfall 215 inches.
Rainfall in 1873 212·85 do.

Composition of force. 305. The composition of the force is shown below :—

					Corps.		Ratio per 1,000 of Strength.			
					27th Regiment N. I.	Rt. Wing 39th Regiment N. I.	27th Regiment N. I.	Rt. Wing 39th Regiment N. I.		
No. of weeks resident...	...	...	...	...	52	52				
Strength	...	...	...	...	252	269				
Total admissions	...	...	...	...	494	312	1960·31	1159·85		
Daily sick	...	...	...	...	14·47	11·65	57·42	43·30		
Died in hospital	...	...	...	...	1	...	3·96	...		
Died out of do.	...	...	...	...	...	...	...	...		
					A.	D.	A.	D.	A.	D.
Fever	...	...	...	...	181	...	77	...	718·52	...
Dengue	...	...	...	...	...	...	...	...	...	...
Cholera	...	...	...	...	...	...	...	...	...	...
Dysentery	...	...	...	...	47	...	43	...	186·50	...
Diarrhoea	...	...	...	...	25	...	6	...	99·20	...
Hepatitis	...	...	...	...	...	...	...	...	...	...
Venereal diseases	...	...	...	...	9	...	9	...	35·71	...

Strength, sickness, and mortality. 306. The mean strength of the troops was 521 ; the hospital admissions were 806 ; the daily sick 267 ; and deaths one.

Comparison with former years. Admissions. Daily Sick. Died. 307. The proportion of sickness was much higher than the average, and is perhaps accounted for by the regiments furnishing detachments to unhealthy stations like the Nicobar Islands and Andamans. The mortality was very low.

Cause of death.

308. The cause of death in the one fatal case was hemiplegia.

Sanitary works.

309. Nothing important.

Shoaygheen.

Latitude 18° North. Longitude 96°45' East.

Height above sea?

Mean temperature?

Average rainfall?

Rainfall in 1873?

Strength, sickness, and mortality.

310. A detachment of the 10th Regiment N. I. garrisoned the station throughout the year.

The mean strength of the force was 118 men; the hospital admissions 163; the daily sick 4·8; and death one.

Comparison with former years.

	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872...	1904·7	76·04	13·1
1873 ...	1381·3	41·3	8·4

311. The sickness and mortality were below the average at the station.

Cause of death.

312. The fatal case was one of paralysis.

Akyab.**Strength, sickness, and mortality.**

313. A detachment of the 24th Regiment N. I. occupied this station for only six weeks of the year. The strength was 127; admissions 59; daily sick 17·2, and one man of the detachment died of dropsy.

Port Blair.

The 27th Regiment N. I. furnished detachments for the convict stations of the Andamans.

Strength, sickness, and mortality.

314. The strength of the troops was 267; the hospital admissions were 270; the daily sick 8; and deaths 3.

Comparison with former years.

	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872...	1335·3	55·1	24·4
1873 ...	1011·2	30·2	11·2

315. The sickness and mortality were below the average.

The causes of death were fever (1), bronchitis (1), and jaundice (1).

Nicobars.

Strength, sickness, and mortality. 316. The detachment was furnished by the 27th Regiment N. I.

The strength was 37; the hospital admissions 268; the average daily sick 5. There was no death.

The numerous admissions were almost entirely due to malarious fevers.

Comparison with former years.				317. The ratios of sickness and mortality of the year are compared in the margin with the results of former years. There was no decrease in the sickness at this very malarious station.
	Admissions.	Daily Sick.	Died.	
Mean of 4 years ending 1872.	6017.3	260.5	42.1	
1873 ...	7243.24	137.2	...	

PART II.

CIVIL.

SECTION I.

SANITARY CONDITION OF JAILS.

318. The strength of prisoners on the 1st January 1873 was 9,281, and during the year 19,589 prisoners were admitted into jails of this Presidency either for offences committed within the Presidency limits, or by transfer from other jails.

During the year 15,859 prisoners were liberated, 2,954 were transferred to jails elsewhere, 10 were transported beyond sea, 3 prisoners made their escape, 264 died, and 74 were executed by judicial sentence.

The total decrease, therefore, amounted to 19,164, and on the 31st December there remained in the jails of this Presidency 9,706 persons, or 425 more than were imprisoned at the commencement of the year. The increase in the daily strength of the jail population at the end of the year was considerable, due probably to increasing scarcity of grain in some of the districts where the monsoon rains had failed.

319. The medical returns show the mean strength of the jail population for the entire year to have been 9,250, and that the strength had varied from 9,006 in April to 9,655 in December. The total hospital admissions during the year were 5,549; the average number of prisoners on the daily sick list was 241·3; and the deaths in hospital 262. Two deaths occurred out of hospital.

Of the mean strength of 9,250 prisoners, 8,875 were males and 375 females. Two hundred and fifty-two males and 12 females died during the year.

The death-rate of the male prisoners was 28·39 per mille, and of the females 32·0.

The proportions of sickness and mortality during the year were as follows :—

Admissions	...	...	...	...	599·8 per mille.
Daily sick	...	...	...	...	26·08
Deaths	...	...	...	...	28·32

It is possible that the actual sickness during the year has been higher than is here represented; for I have ascertained that a practice of keeping prisoners on a “detained” list, without entering their names in the hospital registers, exists in some jails. In future I trust more uniformity may be secured in this respect, as I have requested the Inspector-General of Jails to issue instructions for bringing all prisoners on the hospital admission books who may be detained for more than 24 hours in hospital.

320. There has been very little prevalence of epidemic disease in the jails during 1873. A few cases of small-pox occurred, but all the jails were free of epidemic cholera. Four cases of choleraic diarrhoea were recorded in the Coimbatore Central Jail; but, as there was no cholera in the district, it is very questionable whether these diarrhoea cases were of a choleraic nature. In some of the Southern Jails there was a manifest increase of diarrhoea and dysentery in the autumn months of the year, and mainly from diseases of this class the mortality of the jails was higher in 1873 than it has been since the year 1869.

Comparison with previous years.

321. The following table shows the ratio of hospital admissions and deaths for a series of years:—

Years.	Ratio of Admissions.	Deaths.	Years.	Ratio of Admissions.	Deaths.
1861-62	1502·6	93·0	1867	1012·4	53·9
1862-63	1319·0	89·4	1868	869·1	33·8
1863-64	1373·6	107·6	1869	804·7	41·8
1864-65	1491·1	101·5	1870	735·2	26·5
1865	1290·6	126·3	1871	779·9	17·9
1866	1249·7	124·5	1872	681·14	22·26
			1873	599·89	28·32

322. In former reports I have dwelt on the question of *age* and its influence on the mortality of prisoners, irrespective of all preventible causes of death, and it is necessary that this subject should be borne in view in connexion with the increased death-rate of the past year.

As a matter of fact, the proportion of elderly prisoners in our jails is increasing, and the reason of the increase is that none but life-prisoners, and of these only the able-bodied under 45 years of age, are permitted to be transported to the penal settlement of the Andamans, so that the infirm life-prisoners, and those from 10 years and upwards sentences, accumulate in the various central jails; and amongst persons of this class the mortality must of necessity be high. In the Trichinopoly Central Jail, for instance, where the mortality has been high amongst the aged prisoners during the past year, the progressive increase of aged prisoners is shown in the following table:—

Trichinopoly Central Jail.

Years.	Under 16 years.	16 to 40 years.	40 to 60 years.	Above 60 years.	Total.	Percentage of those between 40 and 60.	Percentage above 60.
1870	1	531	214	11	757	28·26	1·45
1871	2	574	199	7	782	25·44	0·89
1872	10	591	286	35	922	31·01	3·79
1873	4	462	480	75	1,031	46·55	7·27

323. In my report for 1871 (page 103) I gave a table showing the mean ratio of jail mortality according to age for the five years ending 1871, and on comparing the figures with the results for 1873 it will be observed that the law of increase of mortality for increasing age holds good, and affords one explanation of the higher death-rate in 1873, viz., that there are more elderly prisoners exposed to risk.

The excess of mortality in the past year has been almost entirely due to an increase in the number of deaths of prisoners of 50 years of age and upwards.

Mortality according to Age.

	Under 15 years.	15 to 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	Above 60 years.
Mean of 5 years ending 1871.	2.7	10.4	17.7	26.7	30.6	36.2	46.2	45.2	79.2	81.3	189.5
Do. do. 1873.	13.51	6.76	13.65	20.12	24.91	28.41	32.76	33.86	68.65	91.68	250.0

Mortality from principal diseases compared with former years.

324. In the following abstract is shown the proportions of mortality from various diseases, contrasted with the results of previous years :—

					Death-rate per Mille.				
					Cholera.	Dysentery.	Diarrhoea.	Dropsies.	Anæmia.
1861-62	...	...	...	...	26.3	8.5	14.6		
1862-63	...	...	...	...	23.0	7.2	14.5		
1863-64	...	...	...	...	15.6	16.5	17.5		
1864-65	...	...	...	...	21.3	18.2	30.9		
1865	...	...	...	...	30.0	12.8	22.7		
1866	...	...	...	...	25.5	14.3	34.6		
1867	...	...	...	...	0.8	8.8	10.5	5.3	12.06
1868	...	...	...	...	0.2	5.5	7.3	1.9	5.7
1869	...	...	...	...	4.3	6.6	7.3	3.3	2.4
1870	...	...	...	...	1.5	3.6	4.6	1.6	1.5
1871	...	...	...	...	0.7	2.9	2.3	0.8	0.3
1872	...	...	...	...	1.39	3.97	4.51	0.96	1.29
1873	...	...	...	...	0.10	5.94	6.05	2.59	0.43

325. It will be observed that the mortality from dysentery, diarrhoea, and dropsies has been much higher during 1873 than in any of the three preceding years. This may, to some extent, be explained perhaps by the indifferent state of health of prisoners in some of the districts prior to admission. In the Coimbatore and Tanjore districts the prisoners were, during a part of the year, unhealthy on admission, and showed signs of scorbutic disease.

Causes of increased mortality from dysentery, diarrhoea, &c.

In the Coimbatore and Trichinopoly Central Jails also there was an undue amount of sickness during a portion of the year, indicating that the nutrition of the prisoners was imperfect. In the former jail there had apparently been an unusual amount of punishment by restriction of diet, while, although in the latter case no excessive punishment of this nature had taken place, there appeared to be indications that the dietary scale of the jail had in some way been insufficient for the due nutrition of the prisoners. The subject of the condition of the prisoners in these two jails was specially investigated by me in the early part of the present year, and, so far as the dietary and other sanitary arrangements of the jails are concerned, I trust the results of the present year will show that there has been an improvement in the health state of the jails.

326. For the first time since the establishment of Central Jails we find that the mortality in these new buildings has been in excess of that in the old District Jails. This has resulted mainly from an unusual amount of scorbutic disease in the Trichinopoly

and Coimbatore Central Jails, which has carried off the old and infirm. I have already pointed out that, as elderly men accumulate in the Central Jails, we must expect that the death-rates in these institutions will increase.

The proportions of sickness and mortality in the two classes of jails are given below :—

—						Strength.	Ratios of Sickness and Mortality.		
							Admissions.	Daily Sick.	Deaths.
Central Jails	...	...	...	...	...	4,845	461·50	22·25	30·75
District Jails	...	...	...	...	...	4,405	752·09	30·42	25·65

Coimbatore.

(Central Jail.)

Strength, sickness, and mortality.

327. The average strength of the prisoners in this jail was 980 ; the hospital admissions 283 ; and deaths 42.

Comparison with former years.

	Admissions.	Daily Sick.	Died.
Mean of 6 years ending 1872 ..	516·44	19·33	23·98
1873 ..	288·77	19·5	42·85

328. The proportions of sickness and mortality are contrasted in the margin with the results of the previous six years.

329. The sickness and mortality in this jail have been mainly due to diseases of a scorbutic character, and especially to ulceration of the mucous membrane of the large intestines, and sloughing ulcers of the extremities.

On my inspection in November, upwards of 200 of the prisoners were found to be affected with spongy or ulcerated gums, and the health state of the jail was low. The food rations were of good quality, and stated to be issued in the quantities required by regulation, but whatever the causes might have been, it was clear that scurvy prevailed to a great extent, and that changes in the dietary were called for. An increased allowance of vegetables, lime juice, &c., was recommended, and the practice of using a restricted diet as a punishment was recommended to be used with less frequency. These measures appear to have been successful in improving the health of the prisoners.

The deaths during the past year were almost entirely due to diseases of innutrition.

The mortality in the District Jail was even heavier than in the Central Jail, and from the fact that nearly all the prisoners were admitted in indifferent health, and that the Coimbatore District prisoners in the Central Jail suffered more than those transferred from other districts, it would seem clear that the criminal population of this part of the country had already begun to feel the effects of the scarcity of food.

330. Of the 42 deaths, 38 were the result of dysentery, diarrhoea, dropsy, and anæmia, the diseases in fact which invariably result from semi-starvation, or insufficiency of nutritive material for the support of the human frame. While the sickness was prevalent in the jail, it was observed that abrasions of the skin (from fetters) often ran into troublesome ulcers, which in some cases became gangrenous and caused death.

331. The general sanitary condition of the jails was excellent, although they were full. There was no over-crowding and no insanitary condition that I could discover, beyond the fact that the diet had been reduced, in some cases, as a punishment, and that the general condition of the prisoners on admission was enfeebled by scanty and irregular living prior to imprisonment. While the mortality in the Central Jail of this station was in the ratio of 42·8 per mille, in the District Jail it rose to 131·5 per mille from precisely the same causes.

Vellore.

(Central Jail).

332. The average strength of the prisoners in this jail was 951; the hospital admissions numbered 656; and the deaths 9.

333. The ratios of sickness and mortality are contrasted in the margin with the results of the previous six years. It will be seen that this jail has been healthy throughout the year, and that the ratios of sickness and mortality have been below the average.

Comparison with former years.			
	Admissions.	Daily Sick.	Died.
Mean of 6 years ending 1872.	634·19	28·28	16·29
1873 ...	689·80	17·59	9·46

334. There has been no general prevalence of scurvy, or of the diseases so closely allied to it. The jail on inspection was found to be in good sanitary condition and the prisoners generally healthy.

The prisoners from this jail are drawn chiefly from the districts of North Arcot, Cuddapah, Bellary, and Nellore, and the local jails of those districts have also been free of scorbutic complaints. The dietary scale of this jail is the same as in Coimbatore.

335. The deaths were due to phthisis one, debility one, dysentery two, bronchitis one, dropsy three, and suicide by hanging one.

Trichinopoly.

(Central Jail.)

336. The strength of the prisoners in this jail was 933; the hospital admissions were 316; and the deaths 56.

337. The ratios of admissions and deaths are contrasted in the margin with the results of the previous six years.

Comparison with former years.			
	Admissions.	Daily Sick.	Died.
Mean of 6 years ending 1872.	286·45	16·34	28·91
1873 ..	238·69	22·58	60·02

There has been a great increase of mortality during 1873, and from almost identically the same causes which produced the high mortality in the Coimbatore Jail. But in this jail slough-

ing ulcers of the extremities were not common. The Trichinopoly Jail contained a large proportion of old and feeble prisoners, amongst whom the mortality was very high.

338. There does not appear to have been any unusual use of restricted dietary as a jail punishment, but at my inspection of the prisoners they appeared to be anæmic and badly nourished, and mostly in feeble health. Evidences of scurvy moreover were not uncommon. The local jails, from whence the Trichinopoly Central Jail is mostly supplied, showed that the district prisoners were generally unhealthy. The jail itself is well kept, perfectly clean, and not over-crowded, and I was assured that the food supplies had not been tampered with, but it is scarcely possible to understand how the general low health of the inmates could have been brought about if the dietary had been in all respects as laid down by regulation. There has been a tendency for some years past in this jail to diseases of innutrition, due probably in some degree to the class of convicts furnished by the southern districts, but in the past year the mortality from these causes has been excessive.

339. Of the 56 deaths 49 resulted from bowel-complaints, debility, and anæmia, &c. There was no epidemic disease prevalent, and only two of the deaths are attributed to fever.

Rajahmundry.

(Central Jail).

340. The strength of the prisoners in this jail was 831; the hospital admissions 667; and deaths 16.

341. The ratios of sickness and mortality have been a little above the average, as will be seen in the margin. There has been no epidemic disease in the jail, but dropsies have been more frequent and fatal than usual, pointing probably to a debilitated condition of the criminal classes prior to imprisonment.

Comparison with former years.			
	Admissions.	Daily Sick.	Died.
Mean of 6 years ending 1872.	773.81	23.74	11.05
1873 ..	802.64	38.71	19.25

342. The causes of death were phthisis one, apoplexy one, diarrhoea two, dysentery two, bronchitis one, dropsies seven, peritonitis one, and paraplegia one.

Cannanore.

(Central Jail.)

343. The strength of the prisoners was 582; the hospital admissions 131; and the deaths 11.

There was no epidemic disease, and no prevalence of diseases of innutrition.

344. It is worthy of note that a dietary scale, composed of dry cereals in substitution for rice, has been used in this jail with very satisfactory results for the last two years. It was supposed that rice being the ordinary food of the Western Coast people, the dry grains (*raggi and cholum*) would be injurious, but experience has shown that

Change of dietary attended with satisfactory results.

health may be maintained on the ordinary dry cereals, even amongst persons accustomed to rice as their principal article of food. Since the establishment of the new dietary, scorbutic diseases have much diminished.

Comparison with former years.			
	Admissions.	Daily Sick.	Died.
Mean of 6 years ending 1873...	1834-23	44-50	22-48
1873 ...	226-08	21-42	12-30

345. The ratios of sickness and mortality in this jail are contrasted marginally with the results of previous years. It will be observed that the health state of the jail has been favorable.

346. The causes of death were phthisis one, pneumonia one, diarrhoea one, dysentery one, debility five, heart disease one, and ascites one.

Salem.

Central Jail.

347. The average strength of prisoners in this jail was 568; the hospital admissions numbered 183; and the deaths 15.

348. The ratio of mortality was rather higher than the mean of the previous years as shown in the margin, but there has been no epidemic, or serious outbreak of disease, such as occurred in Coimbatore and Trichinopoly. On my inspection of the jail in January of the present year there was very little sickness, and but few indications of scurvy.

Comparison with former years.			
	Admissions.	Daily Sick.	Died.
Mean of 6 years ending 1873...	524-61	25-10	14-03
1873 ...	322-18	12-57	26-40

349. The causes of death were fevers two, phthisis two, apoplexy one, diarrhoea one, debility two, dysentery two, bronchitis two, epilepsy one, albuminaria one, and caries one.

District Jails.

350. It seems scarcely necessary to review the vital statistics of each District Jail separately. In Berhampore, Vizagapatam, Tanjore, Tranquebar, and Coimbatore the mortality has been high from diseases of debility and innutrition, and with increasing scarcity and high prices of food it is only too probable that the experience of the present year may show still more unfavorable results than those chronicled for 1873. But in the greater number of the District Jails there has been but little sickness or mortality, and the whole of them have happily been free of epidemic pestilence. The diseases have been mainly those of debility and impaired constitution, such as the criminal population are especially liable to.

The following table shows the strength, admissions, daily sick, and deaths in each jail, with the ratios per thousand :—

District Jails.

District Jails.	Strength	Admis- sions.	Daily Sick.	Deaths.	Ratio per 1,000 of Strength.		
					Admissions.	Daily Sick.	Deaths.
Madras Penitentiary	557	414	21·07	3	743·26	37·82	5·38
Bellary	363	136	5·57	5	374·65	15·34	13·77
Cuddalore	310	234	8·85	5	754·83	28·54	16·12
Vizagapatam	267	70	5·68	16	262·17	21·27	59·92
Cuddapah	260	265	7·68	6	1019·23	29·53	23·07
Madura	258	85	3·14	5	329·45	12·17	19·37
Palamcottah	249	66	3·00	6	265·06	12·08	24·09
Chittoor	200	267	10·50	1	1335·0	52·5	5·0
Nellore	166	108	4·94	2	650·60	29·75	12·04
Coimbatore	152	151	9·65	20	993·42	63·48	131·57
Ootacamund (Native)	144	52	1·76	1	361·11	12·22	6·94
Tanjore	133	61	4·59	8	458·64	34·51	60·15
Berhampore	132	109	4·74	10	825·75	35·30	75·75
Calicut	129	113	3·04	2	875·96	23·56	15·50
Chingleput	129	117	3·00	...	906·97	23·25	...
Tranquebar	124	132	4·83	8	1064·51	38·95	64·51
Mangalore	119	190	5·13	2	1596·63	43·10	16·80
Kurnool	105	174	4·72	5	1657·14	44·95	47·61
Guntoor	99	85	2·93	3	858·58	29·59	30·30
Rajahmundry	96	79	4·64	1	822·91	48·33	10·41
Russelcondah	91	80	2·03	...	879·12	22·30	...
Trichinopoly	80	53	3·23	3	662·5	40·37	37·5
Guindy	62	60	1·33	...	967·74	21·45	...
Tellicherry	55	37	1·22	1	672·72	22·18	18·18
Masulipatam	37	74	2·58	...	2000·0	69·72	...
Paumbom... ..	34	63	3·55	...	1852·94	104·41	...
Her Majesty's Jail, Madras ...	33	37	0·58	...	1121·21	17·57	...

SECTION II.

VITAL STATISTICS OF THE MADRAS PRESIDENCY.

GENERAL.

Completion of the
census of the Presi-
dency.

351. Since the issue of the last Annual Report the tabulation of the census of 1871 has been completed, and the results are now available for the purposes of this report.

Gross population of
the Madras Presidency.

352. The total population of the Presidency has been ascertained to be 31,281,177, and of these 15,722,306 were males, and 15,558,871 females, the proportion of the sexes being 99 females to every 100 males. There are some grounds for supposing that the female population in certain districts was but indifferently returned. In seven of the Southern districts the female population was returned in excess, but in the remaining 14 districts as less than the male.

Increase of popula-
tion.

353. After deducting the population of the areas of which no census was previously taken, it was found that the numbers in 1871 were 16·1 per cent. in excess of the quinquennial census returns of 1866. As it is not very probable that a population would increase to the extent of 16 per cent. in a period of five years, the inference holds good that the former censuses did not exhibit the actual facts as to the numbers of the people.

Classification of population.

354. The total population was found to be made up of the following classes of people :—

Hindus, including aboriginal tribes	...	...	...	28,863,978
Mahomedans	...	...	...	1,857,857
Native Christians	...	...	...	490,299
East Indians	...	...	...	26,374
Europeans	...	...	...	14,505
Jains	...	...	...	21,254
Others (unspecified)	...	...	...	6,910
Total				31,281,177

Density of population.

355. There is a great difference in the density of population. As a rule the districts on the sea-board and the deltas of great rivers, in which irrigation has been employed for the production of food-supplies, show the greatest number of people in a given area, while in the inland and mountainous districts the population is but thinly distributed. In the Tanjore District there are 540 persons, and in the Combaconum taluq of that district 1,009 persons to a square mile.

On the other hand the Jeypore Hills in the Vizagapatam district have only 24 persons to a square mile, and the Neilgherry Mountains but 66. The average population per square mile for the whole of the Presidency was 226·2. The population of Southern India is not to any great extent a migratory one. There is a steady emigration of a temporary character from the southern districts to the Island of Ceylon, and to a lesser extent to Burmah; but this is much of the same character as the influx of Irish laborers into England during harvest time. There is a demand for labor on the coffee estates of Ceylon, and the demand is met by the migration of coolies from Southern India, most of whom, however, return to their villages when they have served for a few months in Ceylon. The emigration to Mauritius and the West Indian Islands is comparatively insignificant as regards the drain on the population.

Emigration.

356. The Madras population is accommodated in 6,229,954 houses, and on the average there are about five persons to each house. About four-fifths of the houses are mud walled and thatched. Tiled and terraced houses are most common in towns, and thatched houses in the country.

Houses.

357. As regards the proportions of the sexes these were found to vary in the different castes. The females were most numerous amongst Mahomedans, East Indians, Mixed castes (Satani), and Brahmans, and fewest among Rajputs, Barbers, Washermen, and Pariahs. The European female population, owing to the circumstances under which we hold the country, was small, or only in the proportion of 46·2 to 100 males.

Sexes.

. As has been stated before, the female population appears to have been more carefully counted in some districts than in others.

358. The classification of the people according to age was attempted, and with very fair results as regards the decennial grouping. The following table contrasts the results with those of the British Census of 1861 :—

Classification according to age.

Table comparing the Proportions of Populations at each Age in Madras and England and Wales.

Ages.	10		20		30		40		50		60		Above 60		Unknown.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
British Census, 1861.	25.0	24.4	20.6	19.6	16.3	17.5	12.8	13.2	10.2	10.3	7.06	7.08	7.04	7.7	...	...
Madras, 1871...	32.5	32.4	19.5	19.5	17.6	18.9	12.5	11.7	8.2	7.9	5.06	5.1	3.07	3.8	1.6	1.2

This table shows that our Indian population is numerically strong in children and young people; that as regards adult ages, the proportions are much the same as in England, but that in ages above 40 there are relatively fewer who survive in India than in England and Wales.

359. The labors of the Census Office were much increased by the classification of the people according to caste and religion.

360. The caste divisions and sub-divisions of the Hindus were found to be

Hindus.

1. Brahmans (Priests).
2. Kshatriyas (Warriors).
3. Chetties (Traders).
4. Vellalars (Cultivators).
5. Idaiyars (Shepherds).
6. Kammalan (Artizans).
7. Kannacan (Writers).
8. Kaikalar (Weavers).
9. Vunnians (Laboring Castes).
10. Kusaven (Potters).
11. Satani (Mixed Castes).
12. Sembadaven (Fishers and Hunters).
13. Shanars (Palm Cultivators).
14. Ambattan (Barbers).
15. Vannan (Washermen).
16. Others.
17. Pariahs (Out-Castes).

exceedingly numerous and perplexing, and one of the first things to be done was to arrange them in some defined order. A Committee in Madras, which considered the subject fully in 1869, thought that all the various castes of Hindus might be grouped under 17 headings (as per margin).

The several classes of Mahomedans were also grouped in eight divisions.

As regards caste divisions it was ascertained that the population of Southern India was essentially non-Aryan, and that the number of persons claiming (often without the slightest grounds) to be of Aryan descent was only about one-sixteenth of the whole, and these were unequally distributed.

The Mahomedan population also was ascertained to be largely aboriginal, and to be increasing somewhat by the conversion of low caste Hindus, more especially in the Western Coast districts, where the old servile races are treated with contumely by the Hindus.

361. In religion the Hindus were classified as SIVA-worshippers, VISHNU-worshippers, and LINGAM-worshippers. It was ascertained that the VISHNU cult prevailed most commonly in the Northern districts and amongst the Telugu nations, while in the Tamil districts of the extreme South and Western India, SIVA was the popular god. The Lingam-worship did not prevail except in a few localities. The great bulk of the Hindu people are worshippers of local deities, and have no acquaintance with the niceties of the Vedanta theology.

362. The Mahomedan religionists were classified as *Soonees*, *Shias*, and *Wahabis*, but the great bulk of them belong to the former sect.

363. Christianity has made considerable progress in Southern India, and it was found that 490,299 of the native inhabitants had returned themselves as Christians. These people belong to all castes of Hindus, though the greater number appear to have been recruited from

castes occupying a low social position. The Roman Catholic Christians are in the proportion of about four to one of Protestants.

There was hardly an instance, however, of a Mahomedan being returned as a convert to Christianity.

364. In classifying the people according to their industrial employments only the male population was considered. It was found that **Employments of the people.** 63·1 per cent. of the males, or rather more than the whole of the people above 12 years of age, were returned as following some employment. These employments were grouped under six major, and nineteen minor heads, and of the whole population about two-thirds are connected with the cultivation of the soil, either as farmers or laborers. Professional occupations, including Government Service, Civil and Military, absorbed about 2 per cent. of the males, Trade and Commerce nearly 4 per cent., Personal Service 3 per cent., and Industrial Occupations about 8 per cent.

365. As regards education it was ascertained that 1,530,150 of the people could read and write, but that there was a wide difference **Education.** in regard to the degree of education in the several revenue districts. In the town of Madras 18·3 per cent. of the people could read and write, while in the district of Ganjam only 2·5 per cent. Female education, except in the town of Madras and the district of Tinnevely (under the auspices of the great Protestant Mission Societies), had made very little progress.

366. With regard to the higher education, as tested by the University examinations, the European and East Indian populations have succeeded in the highest proportion in passing the Matriculation standard. Next to these classes the Brahmans occupy the best position educationally, and then the Native Christians. The favorable position of the Native Christian community, in regard to the higher education, is due to the labors of the great Mission Societies, which have also done much for the secular education of the non-Christian communities. **Higher education.**

367. The census results showed a total number of 129,686 infirm persons in the Presidency. Of these nearly 14,000 were suffering from mental infirmity. More than 100,000 were blind, deaf or dumb, and nearly 14,000 were victims of that loathsome malady, leprosy. Leprosy was found to be specially prevalent in the districts along the coast line. **Infirmities.**

These are the main results of the census of 1871, but the details are incorporated in numerous tabular statements, and in a special report issued by the Madras Government in two large volumes.

REGISTRATION OF BIRTHS AND DEATHS.

368. The actual registration of the births and deaths for the whole Presidency gives the results of 17·7 and 16·9 per mille respectively **No improvement in registration.** on the population of 1871, but these results are manifestly very imperfect, and I am sorry to have to remark that there has been no general improvement in the record of these important vital statistics during the year 1873.

369. The registry of births has fallen off somewhat in 1873. The numbers recorded annually since 1870 are shown below :—

1870	...	...	...	...	...	...	439,063
1871	...	...	...	...	...	...	517,109
1872	...	...	...	...	...	...	554,379
1873	...	...	...	...	...	...	538,123

The registration results have been fair in Tanjore, Salem, North Arcot, Neilgherries, and Trichinopoly, but very bad in Ganjam, Vizagapatam, Nellore, South Arcot, Madura, and Coimbatore. I have endeavoured to attract the attention of the revenue officers to the subject of these statistics, by publishing the monthly abstracts in the *Fort St. George Gazette*, with notes pointing out where the work was inefficient; but, notwithstanding all the attention given to the subject, the district registration is in many parts of the country done in a perfunctory manner, and with only the faintest attempt at accuracy.

At the present time taking one district with another, we are not registering much more than *one-half* of the actual births, and probably not more than *two-thirds* of the deaths.

370. The village accountants, who are required to collect these statistics, are the parties primarily in fault, and there is much reason to suppose that these functionaries do not take the trouble to record the changes in the village populations with accuracy. Many of the villages in this Presidency are spread over wide areas, and have numerous outlying hamlets, and I suspect that the omissions in the registers are due to the size of the villages, and to the want of a proper system of ascertaining the facts in the remote portions of such villages. In theory, the village commune, with its magistrate, accountant, and public servants, is a perfect institution for the collection of statistical data; but, in practice, it is not so perfect as might be supposed; and, if the revenue accounts are no more accurate than the statistics of births and deaths, there must be ample room for reformation in the machinery of the village system.

371. No legal responsibility has, as yet, been made to attach to village officials in connexion with the registration of births and deaths, and I am of opinion that the time has come when this portion of their public duties should be clearly defined by law. For the last eight years we have been endeavouring to secure an accurate register of the number of persons dying in each year, and of children born for the past four years, but the labor expended in the collection of these figures is, to a great extent, wasted by the inaccuracy and incompleteness of the initial registration.

372. Officers of revenue can do much in securing greater accuracy of registration, and instances have come to my knowledge where, by individual activity, marked improvement of the work has resulted; but in some districts, and especially in those where the zemindary tenure of the soil largely prevails, the revenue officials appear to be powerless in getting the village officials to attend properly to this requirement of the State. For these reasons I should be glad if the administration saw fit to pass a short Act, defining the duties of village officials in registering births and deaths.

373. The total of births registered during the year was 538,123, or in the ratio of 17·7 per thousand of population. Of these, 277,153 were males and 260,970 were females. The registration, so far as it goes, seems to be in accord with the results of other countries, and to illustrate the universal law that more males are born than females. From these figures we see that the births of 106 males are registered for every 100 females.

374. In the Ganjam District the birth registration is bad alike in the taluqs, zemindaries, and municipal towns. In the Vizagapatam District the registration is also bad, except in the municipal towns where the registered births were 26 per thousand, against 10·1 per mille in the district. In the Godavery District the registered births were only 15·1 per mille, while in the municipal towns 23·8 per mille were registered.

The registration in the zemindary estates of this district was worse than in the Government villages.

In the Kistna district only 17·2 per mille of births were registered, while the municipal towns show 22·2 per mille. Here the results are most faulty in the zemindary estates.

In Nellore registration has always been bad, and curiously enough it is worse in Government taluqs than in zemindary estates.

In the Chingleput district the birth registration averaged 21·1 per mille of population, which is a better result than in the municipal town of Conjeveram (20·4 per mille). The registration in South Arcot district was very defective, only 14·3 per mille, against 23·9 per mille in the municipalities of the district.

In Trichinopoly district the registered births were 20·0 per mille, while in the municipal towns 33·3 per mille were recorded.

In the district of Tanjore the births were 27·4 per mille, and in the municipal towns 29·6. These results are on the whole very satisfactory. Tanjore has always been one of the best districts for registration, and still maintains its position.

The registration in the district of Madura is most unsatisfactory. The births come to only 13·8 per mille in Government villages, and 9·1 per mille in zemindary estates, while the municipal towns record a birth-rate of 28·1 per mille.

In Tinnevely again there are the same unsatisfactory results. The district birth-rate as registered is only 15·1 per mille, while the municipal towns have registered 38·3 per mille.

In the district of Kurnool the registered births were 17·6 per mille, while in the municipal town the recorded rate is 26·7 per mille.

In Cuddapah the district rate is 15·8 per mille, the municipal town rate 34·2 per mille, or more than double.

In Bellary the contrast is not quite so great, but here the district-rate in Government villages is 19·3 per mille, and the municipal town rate 28·6 per mille.

In North Arcot district the rural registration is somewhat better than the municipal. In the former the registered births were 22·5 per mille, while in municipal towns only 21·5. The zemindaries of this district have registered exactly the same proportion of births as the municipal towns, viz., 21·5 per mille. The birth registration in the Municipality of Vellore has frequently been complained of.

In Salem district and town there has been considerable improvement in registration, resulting in great part from the strong personal interest taken in the subject by the Acting Collector, Mr. Price. The district registration averaged 23·1 per mille, while the town-ratio came up to 30·5 per mille.

The Coimbatore district always figures unfavorably in regard to the registration of births and deaths, and I am at a loss to account for the circumstance, considering that there are but few zemindary estates of insignificant area in the district. The registration is also most defective in the municipal towns of the district, notwithstanding repeated representations from my office on the subject. The rates for 1873, of births, were 12·6 per mille for the district, and 17·6 per mille for the Municipalities. These figures do not include much more than one-third of the actual births.

In the Neilgherry district the ratio is high for the municipal towns, and defective for the rural tracts. The former is 40·0 per mille, and the latter only 14·2 per mille.

In South Canara the taluq registration was equivalent to 19·8 per mille, and the municipal town to 21·8 per mille.

In Malabar the contrast was greater. The village registration was only 19·0 per mille, while the municipal towns registered 32·4 per mille of births.

I have compared the municipal birth registration with that of the districts in which the towns lie, with the view of demonstrating the imperfection of the rural registration.

375. A year or two since the municipal figures were just as defective as the taluq returns ; but during the last year, in answer to repeated **Improvement in municipal registration.** appeals for assistance in producing better results, the Municipalities have made great efforts to secure a more accurate record of their vital statistics.

In a large number of these towns, I believe, the results are now fairly recorded, but in a minority of them there is still room for improvement. Taking the average of the whole of the municipal towns, which have a population of 1,561,771 persons, we find that the registered birth-rate was 26·5 per mille, against 17·2 per mille for the rural circles and zemindaries.

But 26·5 per mille does not, in point of fact, anything like represent the normal birth-rate of an Indian population. In European countries, where the marriage of females is usually deferred for some years after the nubile age, and where many women never marry at all, the birth-rate ranges from 30 to 35 per thousand of population, but this ratio must necessarily be higher in a country where all women are married at the child-bearing ages. In some of our municipal towns we find the registered birth-rates ranging so high as 50 per thousand of population, and from the special circumstances of the population in India, we may be quite certain that a birth-rate of less than 30 per thousand is not common, except in seasons of great unhealthiness. A consideration of these circumstances leads us to see that the registration of births is still most imperfect in many of the municipal towns, as well as throughout the rural districts of the Presidency, and that combined and systematic efforts on the part of revenue, municipal, and village officials are requisite to ensure anything like trustworthy data.

DEATHS.

376. The total number of deaths registered during the year 1873 was 513,232, or 5,050 in excess of the registration of the previous year, and more than in any year since 1866. As 1873 was a year remarkable for almost complete immunity from epidemic cholera, the increase in the registered number of deaths may be accepted as an indication that there is a slow improvement in registration.

377. But while the registered mortality in the rural districts of the Presidency shows only a death-rate of 16·9 per thousand and in zemindary estates of 13·4 per thousand, the registration in 45 municipal towns shows an average death-rate of 27·7 per mille, and from this fact it is quite obvious that our provincial registration is still falling short of the actual truth.

It is scarcely necessary to review in detail the results of the registration in the Government villages, Zemindaries, and Municipal towns of the several districts, suffice it to state that the municipal registration in every district shows higher death-rates than the rural circles. This in some degree may be due to the influences of town life, the accumulation of human beings on limited areas being universally obnoxious to longevity; but this explanation is not sufficient to account for the great difference in the registers of Municipal towns and of the rural districts. The truth is that the working of the system of village registration is not satisfactory, and that in every year a large number of deaths escape registration.

378. Of the deaths registered 267,756 were of males and 245,476 females. The male deaths are in the ratio of 109 to 100 females, and the excess of male mortality in the registers is more than the ascertained proportions of the sexes of the living population warrant. I believe that sufficient care is not taken to register deaths of females, especially if they be young children or of out-caste tribes.

379. The main causes of death in 1873 are shown in the following table, compared with the results of the previous seven years:—

Years.	Total Deaths.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Other Causes.
1866	600,106	200,961	23,106	110,102	...	265,937
1867	372,026	33,205	27,907	112,511	...	198,408
1868	390,959	8,036	34,330	105,692	...	242,901
1869	451,981	21,034	17,448	132,346	...	281,153
1870	451,020	55,867	11,252	151,027	...	232,874
1871	444,371	17,656	20,823	192,469	38,928	174,495
1872	508,182	13,247	39,074	214,148	39,387	202,326
1873	513,232	840	51,782	222,843	36,392	201,375

From these figures we see that there has been an extraordinary diminution in the mortality from epidemic cholera, a very great increase in the number of deaths from small-pox, a further increase in the heavy mortality of past years from malarious fevers, and a somewhat low average of mortality from other causes.

380. The death registration of the various districts has been unequal, varying from 11 per thousand in Ganjam to 22 and 24 per mille in Tanjore and Salem, and even to 36 per mille in the town and

district of Madras. The average for the whole Presidency has been nearly 17 per thousand of population, a ratio which is doubtless considerably below the actual death-rate.

Of the total deaths 10,760 are returned as "born dead," and deducting these the ratio of registered mortality is only 16·5 per mille.

Deaths at different ages.

381. The deaths according to age were as follows :—

Below 1 year	...	...	...	...	82,259
From 1 to 6	...	...	...	...	82,985
From 6 to 12	...	...	...	...	28,532
From 12 to 20	...	...	...	...	28,347
From 20 to 30	...	...	...	...	46,800
From 30 to 40	...	...	...	...	44,183
From 40 to 50	...	...	...	...	43,498
From 50 to 60	...	...	...	...	50,481
Above 60	...	...	...	...	95,387

The following table shows the numbers of the population at different ages, with the registered mortality, and the proportion of the latter to the former, in all classes of the population :—

Ages.	Population.	Deaths.	Proportion per Mille.
Under 6 years	6,580,599	165,244	25·1
6 to 12	4,812,372	28,532	5·9
12 to 20	4,851,742	28,347	5·8
20 to 30	5,702,078	46,800	8·2
30 to 40	3,778,993	44,183	11·6
40 to 50	2,527,838	43,498	17·2
50 to 60	1,593,982	50,481	31·6
Above 60	983,749	95,387	96·9
Unknown Ages*	449,824	...	...

382. This table shows a low rate of mortality for infant life, much lower in fact than the results of European countries afford; but this I suspect is mainly due to imperfect registration of the deaths of young children. The deaths in persons over 60 years of age are high, but at other ages the ratios are below what they would be if the registration were carefully attended to.

HISTORY OF THE CHIEF DISEASES CAUSING MORTALITY.

(a.)—CHOLERA.

383. In the Annual Sanitary Report for 1872 I demonstrated that a new epidemic visitation of cholera had begun in that year in our northern coast districts, and that a simultaneous southward movement of the pestilence had commenced in the Central Provinces and Deccan. All past experience of the movement of cholera warranted the assumption that the newly invading epidemic would gradually sweep over the

General immunity from cholera in the Madras Presidency during 1873.

* These figures relate chiefly to the population of the Hill Tracts of Ganjam and Visagapatam, of whom no registration of deaths is attempted.

whole tract of the Peninsula of India, and then pass over to the Island of Ceylon ; that it would recur, here and there, in the tracts that had been invaded during the two years following the period of invasion, and that it would finally die out, just as all previous epidemics, of which the facts have been collected, had done. But in recording the facts it behoves us to notice that the experience of former epidemic visitations was not repeated on this occasion, and that, instead of advancing steadily to the southward, the epidemic stopped short in the Kurnool District, in the centre of the peninsula, and in Nellore on the Eastern Coast, while the whole of the southern districts of the Madras Presidency, the province of Mysore, the Native States of Cochin and Travancore, and the Island of Ceylon have remained entirely free from cholera in its epidemic and pestilential form. Another peculiarity may also be noted, viz., that in the districts which were newly invaded in 1872, there has been no recrudescence, or revival, of the epidemic in 1873, so that there has been a most remarkable immunity from cholera throughout the length and breadth of the territories of which I have official cognizance during the year 1873. There was evidently some re-appearance of cholera in the tract of the Mahanuddy valley, as one of our regiments in marching through this tract was attacked by cholera ; but in the Madras districts there was no renewal of the epidemic.

It would be useless to enter into any speculations as to the causes of the arrest of a great epidemic wave, such as we had good reason to expect would affect the population of Southern India. The seasons, and the course of the winds and rainfall, did not materially differ from those in which cholera epidemics have pursued their normal paths, and after considering the facts in many aspects I must confess myself utterly ignorant as to the why and the wherefore of this abortive epidemic movement. It is none the less however, a matter of heartfelt congratulation that the people of Southern India should have been spared the calamity of a great cholera epidemic. The hand of death is already too busy among us, irrespective of the cholera pestilence, which has, within historical times, been a grave obstacle to the progress and civilization of the population, and the absence of this pestilence, even though it be but for a time, is too important a matter in the sanitary history of the country to be passed over in silence.

384. While the Peninsula of India has on this occasion escaped invasion, it must not be forgotten that cholera has been noticed in great force in the territories to the east of the Bay of Bengal. In Burmah, Tennasserin, Cochin-China, the Straits Settlements, and the Islands of the Indian Archipelago the destroyer has reaped a goodly harvest of victims. Some particulars relating to the epidemic in Burmah will be found in the reports of the medical officers of British Troops at Thayetmyo (Appendix II.), but regarding the progress of cholera in the general population of that province the Sanitary Commissioner of British Burmah will doubtless give full particulars.

385. In the latter part of the year 1872 the newly invading cholera had reached so far south as the Kurnool and Nellore Districts. In Kurnool the epidemic ceased in November, but it was beginning to increase in Nellore in the month of December, when 56 deaths occurred. In January of 1873 it prevailed in three taluqs (rural circles), in 49 villages of those circles, causing 356 deaths. In February only 120 deaths occurred, and by the end of March the epidemic was practically extinct in the district. The tract

of country affected lay to the north and west of Nellore town, and no cases were seen in the town itself. Of the total of 840 cholera deaths registered throughout the Presidency, 497, or more than half, occurred in this one district of Nellore, and these in fact are very nearly all the deaths that can be attributed to "epidemic" cholera in the Madras Presidency during the year. The remainder were mostly isolated cases of "sporadic" cholera, occurring in districts where there was no tendency to the diffusion of the pest, such as is observed in the progress of cholera as an epidemic.

Districts in which
deaths from cholera
occurred.

386. Deaths from cholera were registered in the following
ten districts :—

	No. of Villages attacked.	Total Deaths.
Ganjam	30	83
Kistna	10	95
Nellore	74	497
Madras Town, ...	2	6
South Arcot	45	50
Tanjore	21	54
Madura	23	25
North Arcot	2	2
Salem	5	6
Malabar	12	22
Total...	224	840

And in the following eleven named Revenue districts not a single death from cholera, sporadic or otherwise, was brought to notice :—

Vizagapatam.	Coimbatore.
Godavery.	Trichinopoly.
Kurnool.	Tinnevely.
Bellary.	Neilgherries.
Cuddapah.	South Canara.
Chingleput.	

387. In the large province of Mysore, with a population of 5,000,000, there was no death registered from cholera, nor did any death occur in Cochin or Travancore. In Ceylon 14 deaths, mostly isolated cases, were registered.

Cholera in neighbour-
ing provinces.

388. Thus we see that the country, as a whole, has been wonderfully free of cholera, and that the only epidemic distribution of the disease was in the Nellore district, where it was evidently connected with the epidemic invasion of the preceding year.

No epidemic move-
ment except in Nellore
District.

389. Owing to the very limited prevalence of the epidemic in 1873, I do not deem it advisable to incur the expense of a map showing its geographical distribution. The map would practically be blank throughout, except in three or four rural circles of the Nellore District.

Cholera map unneces-
sary.

But, although there has been but little cholera in the Presidency, there are one or two facts to be noted as bearing on the practical subject of the diffusion of the disease.

390. The town of Madras, which for many years had cholera so domesticated in it, that hardly ever a week went by without deaths being recorded from this cause, has, for the last two years, been singularly free of the disease. In 1872 there were only five deaths attributed to this cause, and in 1873 there were six.

The first death in 1873 occurred in the month of February in the General Hospital. The man was a Mahomedan horse-keeper, who had been employed in the Commissariat mule stables on the beach. This case appears to have been an isolated one, and no other death occurred at this time. The next death occurred in the month of April, also in the General Hospital. The patient, a European seaman, was landed from the *S.S. Colombo*, which had just arrived from Calcutta. There was no extension of the disease on this occasion.

391. On the 30th August the British India Steam Navigation Company's steamer *Assyria* arrived in the Madras Roads with 262 emigrants, brought as deck passengers from Calcutta, and intended for transhipment to the emigrant ship *Pandora*, about to sail for Demarara.

On the passage down to Madras the emigrants suffered severely from wet and exposure, and three persons died during the voyage, one death being clearly due to cholera. By some complicated bungling on the part of the Marine and Emigration authorities a number of sick persons were allowed to be landed and carried through the town to the Native Infirmary. In this institution four persons died of cholera, who had been landed from the party of emigrants. Other deaths occurred also of this party in the ship *Pandora*, and in the quarantine ground at Ennore; but, as the persons were buried at sea, or in the quarantine camp, they did not come under the registration of the village officials.

392. A day or two subsequent to the landing of these people in Madras, there were rumours of choleraic seizures in Black Town, but the mortuary register gives no deaths. One case of cholera, an inhabitant of the town, was treated in the Native Infirmary and recovered. No direct communication could be traced in this case with the party of emigrants. The disease did not spread to the villages near the emigrants' camp at Ennore.

It is worthy of remark that this same steamer *Assyria* before arriving at Madras touched at the port of Nizampatam (Vadurevu) in the Kistna district on the 28th August while choleraic diarrhoea was prevailing amongst the emigrants, and stayed there one day, landing rice and other cargo. No passengers were landed, but coolies from the coast villages were employed in landing cargo.

393. On the 15th September cholera deaths were reported from a hamlet in this neighbourhood, and it was thought by the people themselves that the disease had been brought to them from a fishing village in the Nellore district, but subsequent inquiry on the part of the Nellore officials showed that there had been no cholera whatever in this district at the time referred to, so that the theory of importation from a neighbouring district falls to the ground. On the 20th September cholera broke out in Vadurevu, the village connected with the port of Nizampatam. It spread to the town of Bapatla a few miles inland on the 27th September,

and to several other villages in the neighbourhood, and finally died out in November.

The Collector of the district (Mr. Leman) has been so good as to furnish me with the following account of this local outbreak.

The local authorities I may state do not seem to think that communication with the *Assyria* had anything to do with the outbreak, but the fact that cholera should appear in a locality, some of the people of which had had communication with an infected ship, *and no where else, along the many hundred miles of the Carnatic Coast*, is not a little remarkable. No satisfactory inquiry could be instituted in regard to the history of the persons who had been on board and landed cargo, nor of the first cases of the disease, but it is clear from the history, that the cholera was of the usual epidemic type, though limited in the area of its diffusion.

* 15th September 1873.

		M.	F.	Total.
Number of persons				
attacked	.. ..	1	3	4
Died	.. ..	1	3	4

Prevailed but a few days.

† Prevailed from 20th September to 12th October.

		M.	F.	Total.
Attacked	.. ..	9	11	20
Died	.. ..	5	9	14

‡ Prevailed from 24th September to 3rd October.

		M.	F.	Total.
Attacked	.. ..	1	5	6
Died	.. ..	1	5	6

Prevailed from 27th September to 13th November.

		M.	F.	Total.
Attacked	.. ..	5	7	12
Died	.. ..	4	3	7

" 4. In the village of Nayanapalli, which is six miles from Chinna Ganjam and four miles from Ipurpalem, one woman was attacked and died. She probably contracted the disease in Ipurpalem ; it is not certain.

1st October.—One female died.

Prevailed from 10th to 19th October.

		M.	F.	Total.
Attacked	.. ..	5	2	7
Died	.. ..	4	2	6

Prevailed from 28th September to 15th November.

		M.	F.	Total.
Attacked	.. ..	36	38	74
Died	.. ..	22	23	45

Prevailed from 4th to 9th October.

		M.	F.	Total.
Attacked	.. ..	4	1	5
Died	.. ..	2	0	2

Prevailed from 4th to 26th November.

		M.	F.	Total.
Attacked	.. ..	9	4	13
Died	.. ..	6	2	8

" 9. From 27th November up to date no fresh cases have occurred in Repalli Taluq.

" I have the honor to inform you, with regard to the recent outbreak of cholera in this district, that it commenced, at a hamlet of Chinna Ganjam* to which place it was brought, as is supposed, by some fishermen of Pallepalem, a hamlet of Devarampadu, in the Ongole Taluq, of the Nellore District.*

" 2. From thence it was taken to Ipurpalem Vadarevu† by two fisher caste women, beggars, mother and daughter, who were attacked by it there ; the daughter died, and the disease spread in the village ; the mother was taken away when still suffering by her son to Manuproluvandlapalem, where the son also was attacked, and the disease spread in this village‡ also.

" 3. The Bapatla barbers took it thence to Bapatla town and its suburbs. There the number of persons who were attacked and died was comparatively fewer as noted in the margin.

" 5. An inhabitant of Parchur going on business to Ipurpalem was attacked on his way back, and brought the disease to his village.

" 6. It is not certain how infection reached Pittalavampalem, a hamlet of Sandole, which is 12 miles from Bapatla, in Repalli Taluq. The disease raged most here. It is said that one of its inhabitants went to Ipurpalem Vadarevu, and brought it from there.

" 7. Certain Ooppalam ryots going from this hamlet to Ganapavaram in Bapatla Taluq, six miles south-west, took it with them there.

" 8. The disease was reported to have ceased in Bapatla Taluq on the 13th November, but it re-appeared in Totapalli, of Repalli Taluq, on 4th November. The last victim was attacked on the 11th and died on the 26th.

(Signed) G. LEMAN,
Collector of Kistna District.

* This was shown to have been unfounded by inquiries of the Nellore officials.

394. In the remaining districts there was nothing remarkable in the cholera history of the year. There is, in South India, an endemic form of cholera which seems to differ from the epidemic variety only in not spreading, and it must be further remembered that the deaths now and then registered as cholera in non-epidemic seasons may really be due to other causes.

Sporadic cholera.

In what particular respects the endemic cholera of Tanjore, and other localities of the south, differs from the epidemic variety of the disease, is a subject for investigation and report when a sufficient number of facts have been accumulated.

395. There was no cholera in emigrant ships sailing from, or arriving at, Madras. As already stated some cases occurred in a party of emigrants transhipped from the S. S. *Assyria* to the Pandora in September, but these emigrants were subsequently landed at a quarantine camp near Ennore, and the ship meanwhile purified and disinfected prior to their re-embarkation.

Cholera in emigrant ships.

(b)—SMALL-POX.

I have to record a registered mortality of 51,782 (the highest during the last eight years) from small-pox.

396. This disease has prevailed in almost every district, but less in Ganjam and South Canara than anywhere else. Of the registered deaths 26,733 were males and 25,049 females. As is usual in all small-pox epidemics, the highest rate of mortality was attained in the months of March and April. This being the third year of the present epidemic, it may be expected to decline during 1874. The disease has been particularly fatal in Chingleput, North Arcot, Salem, Coimbatore, and Malabar. The heaviest mortality of all occurred in a suburb of the Municipal town of Cochin, inhabited by Mapilahs. In the town of Madras, too, the disease has been more fatal than in any year since 1862. The number of deaths in the town from this cause was 1,062, and amongst them were three unvaccinated European children, the *only* small-pox deaths in this section of the community. The deaths were in the proportion of 0·8 per mille in Europeans, 1·6 per mille in East Indians, 2·1 per mille in Mahomedans, and 2·8 per mille in Hindus, and these proportions indicate pretty fairly perhaps the degree in which the several sections of the people are protected by vaccination. The heavy death-rate from small-pox was in no degree surprising, considering the quality and extent of the vaccination work in past years.

High death-rate from small-pox.

Small-pox in Madras,

397. The operations of the vaccine department during the year have not increased as much as might have been expected from the great prevalence of small-pox.

Vaccination.

The Superintendent-General of Vaccination has furnished me with a return showing a total of 229,315 operations during the year, of which successful results were recorded in 213,203 cases. The number of children under one year of age operated on was 31,407, and, as the infant population cannot be very much short of one million, it will be at once apparent how inadequate the vaccine operations are to protect the community from an epidemic of small-pox,

such as has lately been spreading over the land. It is clear that not more than one out of 30 children, in infant life, is benefited by vaccination. The proportion increases somewhat at later ages, but not in a degree to be of any real benefit to the community.

In addition to the vaccine operations conducted by the staff of the Superintendent-General, there were 49,554 vaccine operations performed in municipal towns by operators paid by the Municipalities.

Excluding the town of Madras, the vaccine operations in which are included in the return of the Superintendent-General, the population of the municipal towns is 1,176,463, and in these towns 49,554 persons were vaccinated during the year, 10,725 of whom were under one year of age.

Municipal vaccination is making considerable progress in many of the towns; and in Trichinopoly, Madura, Dindigul, Tuticorin, Adoni, Vellore, Coimbatore, Salem, Calicut, Palghat, and Cochin, much was done, while the fear of small-pox prevailed, to bring up arrears of work.

Practically, there are no obstacles to vaccination, except the apathy and indifference of the people and the conduct of the operators. Whatever value may be attached to the so-called "religious objections" to the operation, it is found in practice, that a money payment of one anna ($1\frac{1}{2}d.$) per child is sufficient to induce parents to bring forward their children freely to any depôts that may be established. There is, however, an objection on the part of mothers to have young infants operated on, and also to the abstraction of lymph from their children's arms, but these are small difficulties, that might, in my opinion, be easily got over, by giving slightly higher rewards for all children under one year of age, and by compensating the mothers of the children from whom lymph is taken.

In dealing with this question of the extension of vaccination, it must be remembered that the great bulk of the people are very poor, and that they can ill-afford to waste their time in dancing attendance on vaccinators; and that if on public health grounds we desire to extend vaccination, it is the best and wisest policy to treat the poor and ignorant with some consideration.

On these grounds, I have for some years past advocated a system of paying a trifling sum to the children brought up for vaccination, to compensate the parents for loss of time, and to ensure economical and efficient working of the department.

I am glad to say that many of the Local Funds Boards are taking great interest in the question of vaccination; and, as these Boards are expected to find the funds for the payment of vaccinators, they naturally desire to see that they get some return for their expenditure.

Amongst these Local Boards there is widespread dissatisfaction with the present system of vaccination. I have already expressed my views that the duties of the Superintendent of Vaccination and his Assistants should be confined to an inspection and report of work done, and that the Local Boards should be responsible for the employment, payment, and supervision of their vaccinators.

In the districts of Trichinopoly and South Arcot, the new system is to be tried, and I cannot help thinking that, if it has only a fair trial, it must succeed better than our present system.

So far as the municipal towns are concerned, I believe the time is quite ripe for the introduction of a clause in the Municipal Act, making vaccination compulsory by law. It would be a great point to demonstrate to the people at large the fact that certain populations in their midst could be protected from small-pox by a mild and simple procedure.

During the past year the municipal vaccination has on the whole been well done; but when small-pox ceases to be present as an epidemic, the vaccinators and the people alike get careless, and the work is neglected.

Return showing the Numbers vaccinated in each Municipality during the year 1873.

Districts.	Number of Vaccina- tors employed.	Number of Persons vaccinated.	Successful.	Unsuc- cessful.	Unknown.	Number of Children under one year of Age.
Berhampore	1	157	151	6	...	...
Chicacole	1	152	95	50	1	6
Vizagapatam	2	1,296	1,244	32	20	37
Bimlipatam	1	350	322	19	9	19
Vizianagram	1	572	525	35	12	99
Oocanada	1	895	698	192	65	81
Ellore	1	663	523	122	18	6
Rajahmundry	1	987	838	67	82	180
Guntoor	1	1,272	860	238	174	90
Masulipatam	1	1,327	1,258	69	...	50
Nellore	1	590	569	15	6	66
Conjeveram	1	657	568	79	10	27
Cuddalore	2	724	683	41	...	120
Trichinopoly	4	3,846	3,694	152	...	1,067
Tanjore	3	1,378	1,315	46	17	177
Combaconum	1	1,123	983	101	39	226
Mayaveram	1	591	550	38	3	209
Negapatam	2	721	643	78	...	118
Manargoodi	1	531	516	10	5	75
Madura	3	2,630	2,365	150	115	1,793
Dindigul	1	1,250	960	81	209	207
Tinnevely	1	500	391	95	14	23
Palamcottah	1	615	473	119	23	47
Tuticorin	1	1,512	1,236	85	191	133
Kurnool	1	344	293	21	30	45
Cumbum	1	107	71	24	12	16
Cuddapah	1	326	251	49	26	57
Bellary	3	1,369	1,272	92	5	1,281
Adoni	1	1,708	1,641	56	11	986
Ghooty	1	297	282	15	...	136
Anantapore	1	268	267	...	1	116
Vellore	1	1,688	1,319	76	119	250
Coimbatore	1	2,451	2,016	332	103	1,105
Salem	2	1,563	1,403	156	4	626
Mangalore	2	1,242	1,050	96	96	119
Tellicherry	1	1,104	903	61	134	6
Calicut	9	3,874	3,582	113	179	159
Palghaut	4	3,467	3,323	89	50	50
Cochin	3	2,607	2,052	336	219	71
Cannanore	1	904	818	23	63	69
Ootacamund	1	742	712	23	7	159
Coonoor	1	640	584	19	31	259
Srerungum	2	287	285	2	...	39
Wallajahpett	1	227	217	9	1	16
Total ...	72	49,554	43,877	3,462	2,104	10,725

(c)—FEVERS.

398. The deaths registered from fevers were even higher than in the former year. There were 222,843 casualties so reported, and of these 117,387 were males and 105,456 were females. Fevers, one year with another, destroy twice as many people as small-pox, cholera, and all other epidemic causes put together. With regard to the growing increase in the number of fever deaths reported, it must be borne in view that our death registration has never yet been even approximatively perfect; and, secondly that the diagnosis of the causes of death rests upon the testimony of ignorant reporters, who in many cases may possibly assign the wrong causes.

399. In my Annual Report for 1872 I stated that the death registers appeared to afford evidence of the migratory character of the fever miasm, and that the migratory movement appeared to pass from north to south. I have given much attention to this subject during the last two years, and am now forced to the conclusion that the vital statistics hitherto collected are so imperfect that any deductions from them touching the migratory character of the fever miasm may possibly be erroneous. That various tracts of country are in certain seasons more prone to malaria than others, and that there is a periodicity in the recurrence of these malarious seasons is, I think, clear from the observations of numerous persons. For the present I content myself with recording the registered fever deaths in each district for a series of years.

Districts.	Popula- tion.	Fever mortality in							
		1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.
Ganjam ...	1,202,193	7,085	6,809	7,412	8,451	7,655	8,420	12,025	10,732
Vizagapatam ...	1,528,967	6,815	5,913	6,812	9,226	9,757	11,761	24,238	18,098
Godavery ...	1,592,939	9,675	13,885	8,262	17,200	12,654	11,806	14,118	16,201
Kistna ...	1,452,374	3,164	8,537	2,709	3,397	6,625	8,249	11,400	13,371
Nellore ...	1,376,811	2,867	1,834	1,972	2,318	4,138	7,760	8,601	10,279
Madras ...	397,552	2,256	2,456	2,232	2,015	2,296	2,474	2,848	2,569
Chingleput ...	938,184	2,227	1,996	2,096	2,631	3,321	3,916	5,535	5,548
South Arcot ...	1,755,817	2,790	3,501	2,335	3,252	6,354	11,315	10,548	11,394
Trichinopoly ...	1,200,408	3,174	2,456	2,521	2,689	6,289	9,942	9,150	8,988
Tanjore ...	1,973,731	4,905	4,699	5,943	7,151	7,210	7,309	6,105	5,767
Madura ...	2,266,615	4,652	3,510	4,411	4,882	4,195	7,552	8,801	9,297
Tinnevely ...	1,693,959	2,379	1,897	2,420	2,960	4,990	5,758	5,952	6,151
Kurnool ...	659,604	6,698	7,913	7,737	8,160	8,696	9,581	11,406	12,188
Cuddapah ...	1,351,194	6,594	6,168	7,196	9,272	10,244	14,093	12,676	13,333
Bellary ...	1,668,006	11,514	8,227	8,445	8,503	7,753	7,997	8,468	9,669
North Arcot ...	2,015,278	6,273	6,895	7,491	8,454	11,159	15,381	17,107	22,098
Salem ...	1,966,995	6,909	5,100	5,771	9,271	15,658	19,501	18,125	25,254
Coimbatore...	1,763,274	3,275	2,908	3,425	3,483	7,612	11,925	10,103	10,294
Neilgherries ...	49,501	...	...	...	409	397	531	607	406
Malabar ...	2,261,250	12,562	11,138	9,590	13,026	10,223	10,957	11,967	11,892
South Canara ...	918,362	4,287	11,426	6,912	5,596	3,796	6,741	4,323	8,824
Total ...	30,287,842	110,102	112,511	105,692	132,346	151,027	192,469	214,148	222,843

These figures seem to show a diminution of fever mortality in Ganjam and Vizagapatam in 1873, with an increase in the Godavery and Kistna districts to the south. In Tanjore and Trichinopoly there appears to have been a decrease in fever mortality since 1871. In North Arcot and Salem districts fever has been particularly rife and fatal in 1873, and it is worthy of notice, in connexion with this subject, that these districts were especially exposed to heavy and irregular rainfall in 1872. In Kurnool and Cuddapah fevers have been very numerous and fatal without, so far as I can ascertain, any peculiarity of season.

Death-rate from fever
in the several districts
compared.

400. The proportion of registered fever deaths for the whole Presidency has been 7·35 per mille, but these proportions have varied a good deal in different districts as below :—

Ganjam ...	8·9 per mille.	Madura ...	4·1 per mille.
Vizagapatam ...	8·5 „	Tinnevelly ...	3·6 „
Godavery ...	10·1 „	Kurnool ...	12·7 „
Kistna ...	9·2 „	Cuddapah ...	10·2 „
Nellore ...	7·4 „	Bellary ...	5·7 „
Madras ...	6·4 „	North Arcot ...	10·9 „
Chingleput ...	5·9 „	Salem ...	12·8 „
South Arcot ...	6·4 „	Coimbatore ...	5·8 „
Trichinopoly ...	7·4 „	Neilgherries ...	8·2 „
Tanjore ...	2·9 „	South Canara ...	4·1 „
		Malabar ...	5·3 „

It will be seen that the Northern and Central districts have had the highest ratio of fever mortality.

(d)—BOWEL-COMPLAINTS.

401. The deaths recorded under this head were 36,392, or 19,726 males and 16,666 females. The number is rather lower than in the two preceding years. The figures refer chiefly to diarrhoea and dysentery.

(e)—INJURIES.

402. The total of accidental deaths (14,251) is below that of the two preceding years, as shown in the following abstract :—

Years.	Suicides.	Wounding.	Accidents.	Snake-bite or killed by Wild Beasts.	Total.
1866 ...	623	Not separately recorded.	6,216	2,208	9,047
1867 ...	615		5,853	2,145	8,613
1868 ...	602		6,007	2,633	9,242
1869 ...	694		6,057	2,559	9,310
1870 ...	1,438		8,158	2,729	12,325
1871 ...	2,870	1,093	8,473	3,387	15,323
1872 ...	2,366	944	8,724	3,116	15,150
1873 ...	2,077	918	8,267	*2,989	14,251

The number of suicides is given as 2,077, of which number, 988 were returned as males and 1,089 females. The mode of self-murder is not entered in the returns.

From wounds and accidents 9,185 deaths are returned (4,893 males and 4,292 females.)

* Of these, 2,633 were by snake-bite and 351 killed by wild beasts.

From injuries by poisonous snakes 2,638 deaths are returned (1,550 males and 1,088 females).

The comparative prevalence of these noxious reptiles in rural districts is well shown in the case of the town of Madras and neighbouring district. In the town (population 397,552), only one death from snake-bite was registered, while in the Chingleput district (population 938,184) there were 120 deaths from snake-bite.

Deaths from snake-bite have been most numerous in the Tanjore district, 364, South Arcot, 222, Trichinopoly, 212, and Malabar, 181. On the Neilgherry Hills no death from this cause was registered.

The deaths from *wild beasts* are returned as 351 (males 219 and females 132). Of these, 40 are returned from Ganjam, 32 from Vizagapatam, 30 from Coimbatore, and 27 from North Arcot. No death of this kind was registered in the Tanjore, Neilgherry, and Madras districts; but in all other districts some accidents from wild beasts are noted.

SECTION III.

METEOROLOGY OF THE YEAR.

403. In connexion with public health there is no more important meteorological phenomenon than the regularity of distribution of the fall of rain. At the present time we have in Bengal the spectacle of a wide area of country, and a population of many millions of persons brought to the verge of starvation, by the failure of the usual rains at a particular season of the year, while the normal administration, and financial prosperity of Imperial India have been thrown into confusion by the efforts necessitated for the preservation of human life in Bengal.

When we observe how terrible are the consequences of a failure of the ordinary rains, it behoves all concerned to take note of the phenomena of rain distribution, and to register the facts in regard to each year in such a form that the data of the past shall be a guide to future expectations, and that famine and its attendant suffering shall never come upon us without warning and preparation.

404. In the Madras Presidency, since the year 1870, great attention has been paid to the registration of the rainfall. In the whole Presidency there are 223 registering stations, or on the average about 10 stations in each revenue district, where the rainfall is measured and recorded, and the returns of which stations are subjected to the scrutiny of the Government Astronomer prior to publication.

405. It is to be regretted, however, that there should be any unnecessary delay in the publication of the rain statistics, for it is evident that to be of any value to officers of the administration, the returns of rainfall should be published up to date, so that excess or failure in particular districts, and the probable effect on outturn of crops, might be anticipated in time to allow of arrangements being made with the view of mitigat-

ing the effects of scarcity. Recent instructions of Government have been issued for the regular and early publication of rainfall returns, which will secure this object.

406. The average monthly rainfall of each district for a long series of years is Rainfall of former years compared with 1873. not available. The records extend over only four years, but the monthly records for this period (ending 1873) are given in the following table. They show a considerable variation in rain distribution in these four years, and the rainfall of 1873 was somewhat peculiar.

The western, midland, and northern districts of the Madras Presidency derive their principal rain from the south-west monsoon, while the southern and eastern Coast districts, known as the Carnatic, are watered chiefly by the north-east monsoon rains. The season of the south-west monsoon extends from June to October, and of the north-east monsoon from October until February or March, but it rarely happens that any heavy rainfall occurs in the Carnatic after the month of December. January, February, and March are usually clear dry months in all parts of the Presidency. In April and May showers of rain fall in many districts, and this season of the year, which marks the change of the monsoons, is not unfrequently characterised by violent cyclonic storms.

The heaviest rainfall of the Presidency is in the Western Coast districts, where the average rainfall is over 100 inches, and in some parts nearer 200 inches. The districts immediately to the east of the western mountains are generally dry and rainless during the south-west monsoon, but get their share of the north-east rains late in the year. The rainfall of the north-east monsoon is heaviest along the coast line, from the Nellore district southward, and in some seasons, as in 1873, it hardly extends at all inland to the districts of North Arcot, Cud-dapah, Bellary, and Kurnool. In some years a large amount of the rain of the north-east monsoon falls out at sea, in the Bay of Bengal, and is lost to the eastern and southern districts of the peninsula.

Table showing the Monthly Rainfall in the Madras Presidency for four years ending 1873.

Districts.	No. of Places of Observation.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.		Total.	
		Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.
Ganjam	1870	1.49	3	...	...	0.64	1	0.77	2	0.47	1	3.88	5	4.75	8	6.61	10	9.90	14	14.63	12	2.55	3	...	...	45.64	59
	1871	0.02	...	0.32	1	1.32	1	3.99	6	2.23	5	6.02	7	6.54	13	4.89	11	6.35	11	0.67	2	...	...	0.05	...	32.40	57
	1872	...	...	0.21	...	0.19	1	0.52	2	1.73	3	15.23	13	9.35	12	8.08	14	8.71	14	12.26	12	3.27	2	1.29	...	69.89	74
Vizagapatam	1870	3.34	3	...	...	0.84	2	0.74	2	1.96	5	1.71	4	4.32	10	9.63	14	6.07	10	10.12	10	0.98	4	1.78	3	38.20	64
	1871	0.14	...	...	...	...	...	0.92	1	0.88	2	5.50	7	8.42	6	5.08	8	10.67	13	21.07	12	8.20	3	...	...	53.68	55
	1872	...	...	1.55	2	1.29	1	2.09	3	4.58	7	5.00	5	2.85	6	4.48	8	5.22	8	1.14	2	0.11	1	0.09	1	29.13	44
Godavery	1870	1.06	2	...	...	0.12	...	0.39	1	0.92	3	7.88	13	8.85	14	9.11	15	8.13	12	7.40	11	2.69	3	0.63	1	46.14	73
	1871	0.53	1	0.96	1	1.70	...	0.51	1	0.32	1	5.59	7	4.94	9	2.68	5	11.84	12	16.36	13	1.38	2	...	...	44.80	53
	1872	...	...	0.03	...	...	...	0.50	1	1.22	3	6.34	9	5.09	10	8.07	11	9.65	11	11.66	12	1.58	2	0.05	...	33.10	51
Kistna	1870	...	...	0.01	...	...	...	0.44	1	0.94	2	2.48	3	6.65	11	5.35	9	6.01	8	13.76	15	1.58	3	0.41	1	37.63	53
	1871	2.37	2	...	...	0.06	...	0.12	...	0.73	2	3.16	6	5.50	9	4.21	8	9.38	12	8.22	11	0.64	1	...	...	34.39	51
	1872	1.98	1	0.29	1	1.40	1	0.44	1	2.32	5	1.85	4	6.98	12	4.62	8	6.03	10	1.85	4	2.24	3	0.05	...	30.05	50
Nellore	1870	...	...	...	...	...	...	0.54	1	0.69	1	2.27	5	1.46	7	4.54	10	3.89	6	13.16	15	1.24	3	0.02	...	26.81	50
	1871	3.70	3	0.08	...	0.04	...	0.13	...	0.19	1	1.92	4	2.60	5	3.99	5	7.41	8	12.77	8	3.99	4	0.06	...	36.88	38
	1872	1.51	2	0.11	...	0.64	1	0.29	1	1.88	3	0.76	3	4.32	8	2.37	4	3.28	4	8.23	4	17.44	11	0.95	...	36.28	41
Madras	1870	...	...	...	...	...	...	0.08	...	0.06	1	0.97	3	2.57	6	5.92	7	3.04	5	10.28	8	12.00	11	4.79	5	41.31	47
	1871	...	...	2.61	1	...	...	0.10	...	...	...	1.09	2	1.33	4	3.55	7	1.93	4	17.90	17	5.67	6	1.33	2	35.37	44
	1872	...	...	...	...	...	...	...	...	...	...	8.63	12	5.70	16	6.94	13	12.58	13	23.04	15	7.26	16	1.63	4	74.10	98
Chingleput	1870	6.55	6	0.05	2	1.72	1	...	...	...	...	2.84	13	8.82	15	1.43	10	8.18	11	6.21	12	26.41	18	0.43	5	56.85	94
	1871	0.44	3	0.02	1	1.19	3	0.01	1	0.31	2	0.97	6	2.71	19	7.58	21	2.90	13	18.48	14	29.08	21	5.37	11	73.77	110
	1872	...	...	...	...	...	...	1.65	2	4.15	2	1.96	11	2.23	11	3.39	13	3.02	10	10.61	20	13.60	17	9.43	6	51.92	96
South Arcot	1870	3.92	3	0.40	1	0.55	1	0.15	...	0.03	...	4.45	7	4.70	9	5.33	9	6.38	9	13.02	9	6.08	10	0.58	1	46.59	59
	1871	1.85	2	0.36	1	1.03	2	...	...	0.95	2	2.04	4	4.01	7	3.58	7	7.26	7	4.77	8	21.86	14	1.38	3	48.59	57
	1872	...	...	0.21	1	...	...	0.91	1	6.79	3	1.66	4	4.56	11	7.82	13	3.80	6	10.32	10	24.95	15	5.71	8	66.63	70
South Arcot	1870	...	...	9.59	3	...	...	1.40	2	0.20	1	0.87	4	1.80	7	4.10	6	3.52	6	8.21	13	6.48	11	2.82	4	38.99	59
	1871	0.18	1	0.05	...	0.06	...	...	...	0.32	1	2.88	6	2.97	6	8.73	9	3.48	4	10.98	8	8.39	11	4.88	3	49.98	49
	1872	...	...	0.57	1	0.71	1	0.21	...	2.30	3	1.56	3	2.62	5	8.83	6	9.15	5	6.69	10	14.99	13	2.82	3	46.86	57
South Arcot	1870	...	...	0.18	1	0.29	...	2.34	1	6.10	3	1.18	1	5.53	7	6.83	11	3.66	5	6.27	6	17.90	15	6.67	3	56.90	59
	1873	0.02	...	7.36	4	...	...	2.23	2	1.83	2	1.85	3	1.69	3	2.97	7	4.98	7	11.55	17	5.87	10	0.78	2	40.68	57

Trichinopoly...	1870	5	1.43	1	...	0.81	...	0.89	3	0.58	2	5.33	5	0.86	3	7.01	8	4.33	4	8.59	11	6.17	11	2.38	4	37.76	49	
	1871	5	1.91	4	1.09	...	...	0.78	2	4.46	5	1.35	2	0.80	3	3.16	4	5.13	7	7.00	11	9.17	10	1.88	3	36.62	61	
	1872	5	...	0.01	...	0.03	...	1	1.19	3	4.55	5	1.44	4	5.44	6	5.43	7	5.53	8	9.18	13	3.41	8	43.08	54		
	1873	5	...	4.21	5	...	...	...	2.89	5	2.66	1	...	...	1.33	3	3.17	6	2.68	5	14.68	17	3.35	7	...	35.57	51	
Tanjore	1870	10	3.03	3	...	...	...	0.11	...	0.04	...	4.36	7	1.79	5	8.80	11	2.97	5	7.45	6	7.34	13	9.33	9	44.01	57	
	1871	10	3.59	6	0.85	...	...	1	1.74	3	3.48	6	0.84	2	1.94	5	2.43	5	6.13	8	7.93	11	14.32	13	2.60	7	46.68	68
	1872	10	0.49	2	0.13	...	...	2.37	3	6.74	3	1.20	3	6.18	6	4.96	9	3.39	7	6.57	11	15.30	16	5.89	11	53.17	69	
	1873	10	...	...	5.57	6	...	...	5.30	5	2.35	2	1.03	1	1.67	3	3.43	5	2.84	6	14.43	19	6.73	11	2.30	5	45.70	63
Madure	1870	13	1.39	2	0.03	...	...	1.10	2	0.65	1	2.36	4	0.87	2	4.53	6	1.69	3	3.43	6	7.47	11	1.31	4	24.35	40	
	1871	13	2.95	6	0.95	...	...	3	1.71	4	1.63	3	1.99	4	0.63	3	1.81	4	1.16	4	4.13	8	2.64	6	27.14	52		
	1872	13	0.10	...	0.53	...	...	1	1.29	2	0.98	3	1.39	2	1.34	2	2.23	6	3.08	7	2.89	6	...	...	13.94	29		
	1873	13	...	...	2.28	5	...	1	2.63	4	4.07	3	0.13	1	0.53	1	2.12	4	1.33	2	6.92	12	4.17	8	...	26.26	44	
Tinnevely	1870	11	3.14	5	0.03	...	...	0.74	2	0.33	1	0.88	3	0.11	...	0.84	2	1.51	3	2.43	5	6.87	10	1.68	3	20.16	37	
	1871	11	9.20	9	3.39	...	...	2	1.84	4	0.63	1	0.66	2	0.59	1	0.34	1	0.51	1	4.44	7	3.33	10	1.64	5	31.97	47
	1872	11	...	0.95	...	1	1.10	2	2.01	5	1.46	2	0.33	1	0.23	1	0.54	3	2.63	5	3.05	4	8.91	15	3.83	5	23.38	43
	1873	11	...	...	3.68	7	1.57	2	2.06	4	3.21	6	0.66	2	0.49	1	1.37	3	0.43	1	2.13	4	5.03	9	1.18	8	21.76	42
Kurnool	1870	9	0.53	2	...	...	...	...	...	0.81	2	3.50	6	4.36	12	7.13	11	6.31	9	5.15	8	0.54	2	...	...	28.82	53	
	1871	9	0.26	1	...	...	...	0.09	...	3.39	6	1.66	5	6.24	9	2.46	4	6.93	9	1.39	3	1.92	3	...	...	23.37	40	
	1872	9	...	...	...	...	...	0.99	3	1.07	3	3.38	9	4.24	11	3.97	8	7.03	11	4.21	6	1.17	3	1.93	3	28.43	56	
	1873	9	...	...	...	...	...	0.03	...	1.81	3	2.93	4	1.43	4	5.17	10	3.54	5	7.84	10	0.61	2	...	...	23.40	38	
Cuddapah	1870	17	1.39	2	...	...	...	1.18	2	1.18	3	3.15	7	2.85	7	6.99	9	4.56	7	11.54	9	1.10	8	...	...	33.55	47	
	1871	13	0.77	1	0.01	...	...	1	3.50	5	3.03	5	...	3	3.46	8	2.37	4	6.06	7	2.73	4	7.03	7	0.05	...	24.49	43
	1872	13	...	...	...	...	...	0.13	2	4.03	3	2.07	5	3.84	7	5.33	9	4.04	7	7.39	9	4.38	9	2.20	4	36.31	52	
	1873	13	...	...	1.08	3	...	...	0.66	1	0.94	2	1.35	3	0.83	2	4.36	8	3.72	5	11.31	14	0.07	2	0.64	2	25.86	41
Bellary	1870	17	0.04	...	...	...	...	0.11	...	1.63	3	5.11	9	3.17	7	5.00	10	2.53	6	6.64	10	0.63	2	...	...	24.00	43	
	1871	17	0.84	1	...	...	...	0.41	...	4.11	7	2.55	6	1.61	5	2.78	5	5.33	8	3.97	6	1.67	4	...	...	33.78	43	
	1872	17	...	...	...	...	...	1.19	3	1.67	3	2.71	8	3.57	8	2.47	6	7.90	11	6.41	7	1.38	4	1.18	3	38.39	53	
	1873	16	...	...	0.04	...	...	1.10	3	1.66	4	0.47	2	0.87	3	3.46	8	3.37	6	3.34	13	0.31	1	0.01	...	19.63	39	
North Arcot...	1870	9	0.86	2	...	...	...	0.19	1	1.47	2	3.66	8	3.27	8	5.74	7	4.56	7	11.36	11	2.14	7	0.31	1	34.35	55	
	1871	9	1.36	1	0.35	...	...	1	3.54	4	1.79	3	...	3	3.88	6	2.19	5	9.59	10	5.10	8	13.89	13	0.43	1	43.63	53
	1872	9	...	...	0.07	...	...	0.07	...	9.13	3	1.09	4	3.76	7	6.79	13	3.69	8	6.91	8	13.69	11	2.81	7	43.00	60	
	1873	9	...	...	5.75	3	...	...	0.77	2	1.43	3	1.33	3	3.40	3	5.03	9	7.05	8	3.76	14	1.90	4	1.46	4	35.41	53
Salem	1870	10	0.23	1	...	...	...	0.78	1	0.67	6	4.56	8	2.79	7	5.33	7	7.49	9	3.97	11	1.63	4	0.70	3	26.04	58	
	1871	10	0.41	...	...	...	...	1	3.23	3	4.61	7	1.13	3	2.86	5	3.61	5	7.46	10	4.85	7	4.88	6	0.37	1	34.30	61
	1872	10	...	...	0.18	...	...	...	1.18	2	7.74	5	3.66	6	3.42	6	6.10	11	6.11	10	4.83	6	...	...	43.44	63		
	1873	10	...	...	1.70	3	...	...	1.73	4	1.43	2	1.31	3	2.33	4	4.83	9	5.43	8	9.71	14	0.53	2	29.63	50		
Ootimbatore	1870	10	0.45	1	...	...	...	0.39	...	1.51	3	3.13	6	1.63	5	3.06	6	3.08	5	4.94	7	2.34	5	0.63	2	22.03	42	
	1871	10	0.78	1	0.61	...	...	2	1.80	4	3.55	5	1.30	3	1.43	4	1.64	3	2.41	5	5.02	8	3.99	9	0.16	1	29.61	46
	1872	10	...	...	0.43	1	...	2	1.73	2	2.83	5	3.90	6	2.33	5	3.49	5	4.33	9	3.09	6	4.69	13	1.33	4	26.13	55
	1873	10	...	...	1.99	3	...	...	3.57	6	3.10	5	0.73	4	1.15	4	2.55	5	1.98	4	7.70	12	...	...	0.19	1	24.47	47

Return showing the Monthly Rainfall in the Madras Presidency for four years ending 1873.—(Continued).

Districts.	No. of Places of Observations.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.		Total.	
		Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.
South Canara.	1870	...	...	...	...	0.34	1	0.26	1	0.70	4	36.05	26	40.31	30	20.06	27	10.58	18	17.43	22	0.79	5	...	...	126.42	134
	1871	4.94	8	0.57	...	0.49	1	1.65	4	9.22	14	39.99	27	43.28	29	16.62	20	15.33	21	8.06	11	2.98	6	0.07	...	148.20	187
	1872	...	...	...	...	...	...	0.61	2	7.83	4	43.07	22	71.64	30	32.71	28	12.36	21	3.27	9	1.06	3	0.54	2	173.09	121
	1873	...	...	0.47	2	...	...	1.87	3	7.55	9	40.88	28	28.05	28	16.20	16	11.50	19	7.85	13	0.04	1	0.45	1	114.81	120
Malabar	1870	0.65	1	0.30	...	1.39	2	1.00	2	8.56	5	28.65	23	26.94	28	8.96	18	7.04	13	15.13	16	2.51	6	0.33	1	96.46	115
	1871	3.00	4	0.41	1	1.58	2	5.14	9	6.98	11	37.15	26	38.56	29	12.25	18	9.58	16	6.39	10	8.83	10	0.21	1	130.08	187
	1872	...	...	0.24	1	0.03	...	3.47	6	6.95	5	30.45	24	31.73	26	16.10	25	14.68	19	3.63	8	3.21	8	1.99	3	112.47	124
	1873	...	...	0.98	4	...	...	4.84	7	11.26	13	30.76	27	33.28	29	9.08	14	6.65	11	7.85	15	0.40	1	0.75	1	112.86	123
Totals	1870	38.53	42	0.94	3	9.65	13	8.97	18	18.19	39	136.58	166	123.48	161	127.06	189	138.67	174	223.10	210	72.97	127	24.11	33	905.95	1195
	1871	36.59	49	11.95	21	22.19	27	25.43	49	64.39	106	115.11	159	153.69	185	80.90	139	126.52	177	87.14	189	171.37	161	15.41	39	910.68	1221
	1872	0.59	2	3.52	7	1.97	5	22.55	35	79.22	61	131.85	149	179.91	204	146.49	230	122.04	197	143.26	171	165.71	178	58.62	96	1053.88	1335
	1873	0.08	1	55.60	53	2.76	5	34.86	55	49.89	69	95.88	112	104.94	147	99.25	168	80.50	135	189.30	262	60.69	106	30.77	42	808.52	1154
Averages	1870	1.68	2	0.04	...	0.48	1	0.43	1	0.21	2	6.83	8	6.12	9	6.25	9	6.43	9	11.15	10	3.65	6	1.20	1	45.30	60
	1871	1.83	...	0.60	1	1.11	1	1.27	2	3.22	5	5.75	6	7.68	9	4.04	7	6.32	9	4.36	7	8.57	8	0.77	2	45.58	61
	1872	0.02	...	0.17	...	0.10	...	1.13	2	3.96	3	6.59	7	8.99	10	7.33	11	6.10	10	7.16	8	8.28	9	2.53	5	52.69	66
	1873	0.004	...	2.78	2	0.13	...	1.74	2	2.47	3	4.77	5	5.24	7	5.18	9	4.21	7	10.03	14	3.08	5	1.61	2	41.26	59

From these figures we see that the mean rainfall for the whole Presidency has been less in 1873 than in any of the three previous years. For 1870 and 1871 the average of all the registering stations was about 45 inches. In 1872, a year of excessive rainfall, the average was nearly 55 inches, and in 1873 only 41 inches, the average number of rainy days in 1873 being only 59 against 60, 61, and 66 in the three previous years. On the whole therefore it may be said that the rainfall of 1873 has been defective.

407. The south-west monsoon rains, though setting in at the usual time in 1873 on the Western Coast, were very much later than ordinary in the midland and northern districts, and we see that Ganjam and Vizagapatam, which had 15·2 and 7·8 inches of rainfall, respectively, in June 1872, had only 1·7 and 2·1 inches in June of 1873. The rains were very late also throughout the whole of the Deccan and Mysore. It is usual for the whole country to be green with grass and young grain by the end of June, but in this year the land was brown and bare up to the end of July, and great fears were at one time entertained that the rains would come too late to save the raggy (*eleusine*) crops of Mysore; but, although late, the rains appeared in time to secure an adequate dry grain harvest. The end of the south-west monsoon in October gave heavy rain in all parts of the country, but the north-east rains from the end of October were not so heavy as usual, and in some districts, as in Trichinopoly, failed almost entirely. In Tinnevely the rice crops would have been lost but for a timely rainfall in February of 1874 on the Western Ghauts, which flooded the mountain streams, filled the tanks, and gave a sufficiency of water for the ripening of the harvest.

408. The peculiarities of the seasons of 1873 in the south of India seem to have been (1) heavy rainfall in February over most of the southern districts; (2) a late south-west monsoon, with heavier rainfall than usual in October; and (3) a scanty north-east monsoon, with deficient rainfall, in the districts removed from the Eastern Coast line. The heavy rains in February had the effect of diluting the salt water of the lagoons so much that no salt could be manufactured until a much later period in the year than usual.

409. The average rainfall for the whole area has been 14·56 inches less than in 1872 and 5·41 and 5·12 less than in 1871 and 1870, respectively, and the average of rainy days has been 58.

410. Mr. Pogson's monthly meteorological abstracts of the Provincial Observatories are appended. There seems to have been nothing remarkable in the phenomena of the year as shown in these average statements.

There was no storm or unusual atmospheric disturbance during the year.

Mean Monthly Meteorological Results at the different Meteorological Stations in the Madras Presidency for the year 1873.

Stations.	Barometer.		Dry Bulb Thermometer.				Wet Bulb Thermometer.				Sun Ther- mometer.		Wind.		Rain.		Clear Sky.	General Weather.	
	Reduced to 32°.	Daily Range.	Mean.	Maxi- mum.	Mini- mum.	Range.	Mean.	Maxi- mum.	Mini- mum.	Range.	In Vacuo.	Ex- posed.	Daily Velo- city.	Mean Direction.	Amount.	Days.			
1872.	Inches.	Inches.	°	°	°	°	°	°	°	°	°	°	°	Points.	Points.	Inches.	No.	Cents.	Cents.
	26.996	0.123	66.4	79.6	54.4	25.4	57.4	60.9	53.1	7.8	59	92.0	49.3	8	East.	0.00	...	56	76
	26.988	0.120	71.4	82.8	61.6	21.2	62.4	64.6	59.2	5.4	62	132.4	95.0	9	E. by S.	0.43	1	63	77
	26.954	0.127	76.0	89.4	63.7	25.7	62.2	74.7	58.6	6.1	48	141.6	103.6	14	S. S. E.	0.00	...	46	67
	26.904	0.131	77.6	91.1	67.8	23.3	66.8	69.0	63.2	5.8	59	141.3	105.7	18	S. S. W.	...	...	57	51
	26.861	0.122	80.0	92.5	70.5	22.0	67.5	69.0	64.7	4.3	55	141.9	107.4	17	S. by W.	...	...	45	51
	26.846	0.125	74.5	86.9	67.0	19.9	67.0	68.7	64.3	4.4	69	135.2	99.0	36	S. W. by W.	1.44	6	57	34
	26.864	0.083	73.1	84.1	66.8	17.3	66.6	68.4	64.0	4.4	72	129.3	95.5	22	W. S. W.	0.72	8	51	35
	26.886	0.108	72.4	83.0	66.0	17.0	67.4	69.3	64.2	5.1	79	130.4	95.1	239	West.	8.28	16	41	32
	26.915	0.124	72.2	82.4	65.7	16.7	67.0	68.9	64.7	4.6	78	132.6	95.1	235	West.	5.50	12	42	37
	26.915	0.120	71.0	79.6	65.7	13.9	67.1	68.9	64.7	4.2	83	132.8	96.1	132	S. W. by W.	11.11	21	48	28
	27.010	0.110	69.7	79.5	61.8	17.7	62.8	65.4	59.9	5.5	69	132.1	93.9	142	E. N. E.	0.16	2	46	55
	27.014	0.111	67.9	79.2	59.6	19.6	60.8	63.5	57.7	5.8	68	130.9	94.6	120	E. N. E.	0.04	2	48	65
Mean...	26.929	0.114	72.6	84.1	64.2	19.9	64.5	67.6	61.4	5.2	66	97.7	61.6	150	S.	27.68	68	49	50
Bellary.	28.471	0.154	72.8	89.4	59.0	30.4	58.6	63.1	53.2	9.9	43	136.4	100.0	80	E. S. E.	0.00	...	41	90
	28.450	0.153	79.1	94.4	67.0	27.4	63.1	...	...	...	41	141.7	104.9	111	East.	0.04	1	42	78
	28.400	0.163	84.9	101.2	72.4	28.8	63.0	...	...	...	29	152.5	112.6	127	S. by E.	0.00	...	32	83
	28.330	0.174	87.4	104.2	76.6	27.6	67.4	70.0	63.8	6.2	37	155.3	114.6	178	W. S. W.	1.25	5	40	69
	28.292	0.152	87.1	103.4	77.3	26.1	69.6	73.2	66.2	7.0	43	158.1	114.8	173	West.	2.62	7	45	55
	28.259	0.138	83.9	97.8	75.9	21.9	70.1	71.6	67.7	3.9	51	153.1	105.9	308	W. S. W.	0.19	4	33	38
	28.284	0.102	80.7	92.8	75.2	17.6	69.4	70.7	67.5	3.2	58	138.8	98.8	22	W. S. W.	0.07	5	34	19
	28.315	0.135	81.1	94.8	73.3	21.5	69.6	70.9	67.6	3.3	58	146.5	102.9	281	W. by N.	3.41	10	29	29
	28.351	0.145	79.8	91.8	72.6	19.2	68.8	70.7	66.8	3.9	60	145.0	101.8	246	W. by N.	2.21	8	34	29
	28.380	0.137	77.1	88.9	71.0	17.9	68.9	70.7	66.3	4.4	68	133.1	99.7	88	N. by E.	9.96	16	35	22
	28.502	0.142	73.9	88.5	63.9	24.6	63.6	67.2	59.4	7.8	58	132.6	99.5	68	E. N. E.	1.15	3	37	53
	28.501	0.140	73.0	89.2	61.9	27.3	61.3	65.8	56.4	9.4	62	130.8	100.1	67	E. by N.	0.00	0	49	68
	Mean...	28.378	0.145	80.0	94.7	70.5	24.2	66.1	69.4	63.5	5.9	50	143.6	104.6	157	S.	20.90	59	37	53

[illegible]

Mean Monthly Meteorological Results at the different Meteorological Stations in the Madras Presidency for the year 1873.

Stations.	Barometer.		Dry Bulb Thermometer.				Wet Bulb Thermometer.				Sun Ther- mometer.		Ground Minimum Thermometer.	Wind.		Rain.		Clear Sky.	General Weather.		
	Reduced to 32°.	Daily Range.	Mean.	Maxi- mum.	Mini- mum.	Range.	Mean.	Maxi- mum.	Mini- mum.	Range.	Humi- dity.	Sun Ther- mometer.		Daily Velo- city.	Mean Direction.	Amount.	Days.				
												In								Ex- posed.	
Madras.	Inches.	Inches.	°	°	°	°	°	°	°	°	°	°	°	°	Miles.	Points.	Points.	Inches.	No.	Cents.	Cents.
	29-971	0-121	73-9	84-7	65-8	18-9	68-1	71-3	64-3	7-0	75	133-3	99-5	58-9	120	6	E. N. E.	0-01	1	42	67
	29-951	0-123	77-1	85-7	70-8	14-9	72-0	73-9	69-2	4-7	78	127-8	98-4	65-6	134	7	E. by N.	6-28	4	44	63
	29-912	0-133	78-9	88-2	70-7	17-5	72-3	74-9	69-0	5-5	73	134-3	101-6	65-5	143	11	S. E. by E.	0-00	...	36	82
	29-800	0-134	83-8	93-2	77-9	15-3	77-3	79-1	74-9	4-2	75	137-4	107-3	75-6	207	12	S. E.	1-37	2	51	71
	29-760	0-122	85-2	94-8	79-0	15-8	77-6	78-8	75-5	3-3	71	136-9	107-3	76-4	212	13	S. E. by S.	0-02	1	37	75
	29-677	0-124	87-4	101-6	81-4	20-2	75-6	77-9	72-4	5-5	58	137-8	110-6	79-3	238	20	S. W.	1-96	11	30	34
	29-711	0-132	86-2	98-5	79-7	18-8	74-7	76-5	71-6	4-9	59	135-3	107-1	77-2	227	20	S. W.	2-23	11	36	26
	29-753	0-126	83-6	94-1	77-8	16-3	75-4	76-9	72-9	4-0	69	134-7	104-1	75-8	176	19	S. W. by S.	3-39	13	43	37
	29-786	0-134	83-5	94-6	77-5	17-1	75-5	77-2	72-4	4-8	70	138-3	...	75-5	179	18	S. S. W.	6-02	10	36	41
	29-814	0-119	79-0	86-6	74-8	11-8	75-3	77-2	72-8	4-4	85	131-2	...	72-5	138	29	N. W. by N.	10-61	20	36	28
	29-959	0-114	77-2	84-3	71-8	12-5	72-1	74-1	69-4	4-7	79	127-8	98-7	68-5	206	...	North.	13-51	17	56	34
	29-979	0-113	75-5	83-5	69-7	13-8	70-8	73-2	68-1	5-1	80	128-4	99-6	65-5	155	1	N. by E.	9-43	6	43	60
Mean ...	29-839	0-124	80-9	90-8	74-7	16-0	73-8	75-9	71-0	4-8	72	133-6	103-4	71-3	177	10	S. E.	51-83	96	40	51
Madras.	Inches.	Inches.	°	°	°	°	°	°	°	°	°	°	°	°	Miles.	Points.	Points.	Inches.	No.	Cents.	Cents.
	29-470	0-148	75-7	87-9	65-6	22-3	68-0	71-3	63-4	7-9	68	131-8	103-9	57-8	124	6	N. E. by E.	0-00	...	62	59
	29-457	0-125	77-9	88-5	70-0	18-5	70-6	72-7	67-1	5-6	70	133-9	...	62-8	116	7	E. by N.	1-90	5	73	46
	29-413	0-138	82-0	95-2	72-8	22-4	72-4	75-8	65-5	10-3	63	140-4	...	63-6	99	10	E. S. E.	0-00	...	31	63
	29-344	0-146	83-6	97-0	74-5	22-5	75-1	76-6	72-1	4-8	67	140-0	...	63-6	99	10	E. S. E.	0-00	...	31	63
	29-318	0-126	84-7	98-1	76-1	22-0	75-7	77-0	73-5	3-5	68	142-0	...	71-4	79	11	S. E. by E.	6-12	6	47	58
	29-283	0-119	84-2	96-6	76-9	19-7	74-1	75-8	71-0	4-8	62	138-2	...	72-4	79	14	S. S. E.	6-20	3	37	51
	29-313	0-128	84-5	98-8	76-9	21-9	73-9	...	...	...	62	138-2	...	72-5	123	24	West.	0-32	1	32	40
	29-329	0-124	83-8	96-9	75-6	21-3	74-6	...	...	...	61	142-3	...	73-7	131	25	W. by N.	2-20	2	...	51
	29-359	0-152	83-9	98-0	75-8	22-2	74-5	...	...	...	65	141-7	...	73-4	93	24	West.	2-21	4	...	48
	29-364	0-137	80-1	91-9	74-2	17-7	74-7	76-9	71-7	6-2	65	143-2	...	73-3	90	25	W. by N.	2-88	6	...	53
	29-472	0-135	78-5	87-9	72-7	15-2	73-5	75-6	70-9	4-7	78	135-6	...	72-9	60	25	W. by N.	5-97	15	...	40
	29-485	0-140	77-6	88-0	70-4	17-6	72-1	75-0	68-7	6-3	79	131-9	...	71-2	113	1	N. by E.	3-87	7	...	45
Mean ...	29-384	0-135	81-4	98-7	73-4	20-3	73-2	75-2	69-4	5-9	69	138-0	103-9	69-4	102	14	S. by E.	33-22	53	47	51

Mashihpatain.											
January	29-968	0-130	73-3	83-0	64-2	18-8	67-3	71-0	62-0	9-0	73
February	22-944	0-127	77-5	86-4	69-0	17-4	70-6	73-0	66-5	6-5	71
March	29-806	0-133	79-7	89-3	71-8	17-5	72-1	74-0	68-9	5-1	70
April	29-775	0-134	85-0	95-3	78-7	16-6	73-1	79-0	74-3	4-7	16
May	29-733	0-126	86-5	96-7	80-5	16-2	78-0	79-3	75-5	3-8	22
June	29-611	0-130	89-1	101-3	81-7	19-6	79-0	77-0	73-7	3-3	23
July	29-643	0-119	85-2	95-0	78-9	16-1	74-9	76-4	72-4	4-0	28
August	29-702	0-124	82-8	92-1	77-5	14-6	76-0	77-8	78-8	3-5	24
September	29-741	0-128	83-4	98-1	77-6	15-5	76-0	77-5	73-3	4-2	23
October	29-813	0-114	79-1	88-2	75-3	9-9	74-9	76-1	79-3	3-1	17
November	29-986	0-112	76-4	83-7	69-9	18-8	69-9	72-4	66-8	5-6	25
December	29-994	0-120	74-5	82-6	67-8	14-8	68-8	72-1	65-0	7-1	23
Mean	29-254	0-125	81-0	90-3	74-4	15-9	73-5	75-4	70-4	5-0	22
January	29-948	0-129	76-5	83-3	69-3	14-0	70-1	73-0	66-3	6-7	73
February	29-929	0-129	78-4	84-7	73-5	11-2	72-8	74-7	70-1	4-6	70
March	29-905	0-137	81-0	87-5	74-6	12-6	73-4	75-7	69-8	5-9	19
April	29-809	0-135	83-1	91-7	77-1	14-6	77-6	80-0	74-1	5-9	17
May	29-774	0-123	84-1	93-7	78-1	15-6	78-3	80-2	74-9	5-3	15
June	29-716	0-126	86-0	99-1	78-5	20-6	76-4	...	...	...	20
July	29-747	0-135	85-2	99-4	78-4	21-0	76-2	...	...	...	17
August	29-778	0-126	83-3	94-0	77-5	16-5	76-2	78-3	72-6	5-7	72
September	29-814	0-145	82-6	94-1	76-9	17-2	76-1	...	...	...	20
October	29-820	0-137	79-8	87-9	75-2	12-7	76-1	...	...	...	20
November	29-937	0-120	77-9	84-0	74-0	10-0	73-9	76-3	71-5	5-5	15
December	29-961	0-117	77-1	83-3	73-1	10-2	72-6	75-2	69-9	5-7	17
Mean	29-845	0-130	81-2	90-2	75-5	14-7	75-0	76-7	71-0	5-7	18
January	29-038	0-151	73-3	87-9	60-0	27-9	65-1	70-3	58-4	11-9	64
February	29-019	0-146	77-7	90-6	66-6	24-0	68-8	72-0	64-1	7-9	64
March	29-979	0-166	82-3	97-4	69-1	23-3	69-2	71-4	65-2	6-2	52
April	29-906	0-164	84-9	99-6	75-2	24-4	72-7	74-1	70-1	4-0	57
May	29-864	0-143	86-8	100-5	77-1	23-4	73-9	75-5	70-7	4-8	56
June	29-849	0-122	83-4	97-3	74-8	22-5	72-6	74-2	69-9	4-3	60
July	29-874	0-129	82-5	96-2	73-7	22-5	72-1	73-9	69-1	4-8	61
August	29-895	0-135	80-2	91-6	72-7	18-9	73-2	75-3	69-8	5-5	73
September	29-926	0-151	80-5	92-3	72-0	20-3	72-8	75-0	69-2	5-8	70
October	29-930	0-144	77-9	87-8	71-7	16-1	73-4	76-0	70-1	5-9	82
November	29-038	0-135	76-7	87-0	68-1	18-9	69-7	73-2	65-8	7-4	71
December	29-047	0-141	76-2	88-6	66-4	22-2	67-9	71-6	63-8	7-8	66
Mean	29-947	0-145	80-2	93-1	70-6	22-5	70-9	73-5	67-2	6-4	65
January	28-167	0-131	69-7	84-6	56-3	23-3	55-8	63-1	53-3	9-8	51
February	28-162	0-136	76-7	89-8	66-3	24-5	66-6	71-5	60-2	7-3	60
March	28-098	0-153	81-3	95-8	68-4	27-4	67-1	70-3	61-3	9-0	49
April	28-010	0-160	87-8	100-9	75-2	25-7	69-8	73-2	64-6	8-6	42
May	27-777	0-146	85-6	100-4	75-4	25-0	74-4	76-7	70-5	6-2	57
June	27-892	0-130	82-3	94-6	74-4	20-2	73-4	75-6	70-1	5-9	66
Negapatain.											
January	29-948	0-129	76-5	83-3	69-3	14-0	70-1	73-0	66-3	6-7	73
February	29-929	0-129	78-4	84-7	73-5	11-2	72-8	74-7	70-1	4-6	70
March	29-905	0-137	81-0	87-5	74-6	12-6	73-4	75-7	69-8	5-9	19
April	29-809	0-135	83-1	91-7	77-1	14-6	77-6	80-0	74-1	5-9	17
May	29-774	0-123	84-1	93-7	78-1	15-6	78-3	80-2	74-9	5-3	15
June	29-716	0-126	86-0	99-1	78-5	20-6	76-4	...	...	...	20
July	29-747	0-135	85-2	99-4	78-4	21-0	76-2	...	...	...	17
August	29-778	0-126	83-3	94-0	77-5	16-5	76-2	78-3	72-6	5-7	72
September	29-814	0-145	82-6	94-1	76-9	17-2	76-1	...	...	...	20
October	29-820	0-137	79-8	87-9	75-2	12-7	76-1	...	...	...	20
November	29-937	0-120	77-9	84-0	74-0	10-0	73-9	76-3	71-5	5-5	15
December	29-961	0-117	77-1	83-3	73-1	10-2	72-6	75-2	69-9	5-7	17
Mean	29-845	0-130	81-2	90-2	75-5	14-7	75-0	76-7	71-0	5-7	18
January	29-038	0-151	73-3	87-9	60-0	27-9	65-1	70-3	58-4	11-9	64
February	29-019	0-146	77-7	90-6	66-6	24-0	68-8	72-0	64-1	7-9	64
March	29-979	0-166	82-3	97-4	69-1	23-3	69-2	71-4	65-2	6-2	52
April	29-906	0-164	84-9	99-6	75-2	24-4	72-7	74-1	70-1	4-0	57
May	29-864	0-143	86-8	100-5	77-1	23-4	73-9	75-5	70-7	4-8	56
June	29-849	0-122	83-4	97-3	74-8	22-5	72-6	74-2	69-9	4-3	60
July	29-874	0-129	82-5	96-2	73-7	22-5	72-1	73-9	69-1	4-8	61
August	29-895	0-135	80-2	91-6	72-7	18-9	73-2	75-3	69-8	5-5	73
September	29-926	0-151	80-5	92-3	72-0	20-3	72-8	75-0	69-2	5-8	70
October	29-930	0-144	77-9	87-8	71-7	16-1	73-4	76-0	70-1	5-9	82
November	29-038	0-135	76-7	87-0	68-1	18-9	69-7	73-2	65-8	7-4	71
December	29-047	0-141	76-2	88-6	66-4	22-2	67-9	71-6	63-8	7-8	66
Mean	29-947	0-145	80-2	93-1	70-6	22-5	70-9	73-5	67-2	6-4	65
January	28-167	0-131	69-7	84-6	56-3	23-3	55-8	63-1	53-3	9-8	51
February	28-162	0-136	76-7	89-8	66-3	24-5	66-6	71-5	60-2	7-3	60
March	28-098	0-153	81-3	95-8	68-4	27-4	67-1	70-3	61-3	9-0	49
April	28-010	0-160	87-8	100-9	75-2	25-7	69-8	73-2	64-6	8-6	42
May	27-777	0-146	85-6	100-4	75-4	25-0	74-4	76-7	70-5	6-2	57
June	27-892	0-130	82-3	94-6	74-4	20-2	73-4	75-6	70-1	5-9	66
Salem.											
January	29-948	0-129	76-5	83-3	69-3	14-0	70-1	73-0	66-3	6-7	73
February	29-929	0-129	78-4	84-7	73-5	11-2	72-8	74-7	70-1	4-6	70
March	29-905	0-137	81-0	87-5	74-6	12-6	73-4	75-7	69-8	5-9	19
April	29-809	0-135	83-1	91-7	77-1	14-6	77-6	80-0	74-1	5-9	17
May	29-774	0-123	84-1	93-7	78-1	15-6	78-3	80-2	74-9	5-3	15
June	29-716	0-126	86-0	99-1	78-5	20-6	76-4	...	...	...	20
July	29-747	0-135	85-2	99-4	78-4	21-0	76-2	...	...	...	17
August	29-778	0-126	83-3	94-0	77-5	16-5	76-2	78-3	72-6	5-7	72
September	29-814	0-145	82-6	94-1	76-9	17-2	76-1	...	...	...	20
October	29-820	0-137	79-8	87-9	75-2	12-7	76-1	...	...	...	20
November	29-937	0-120	77-9	84-0	74-0	10-0	73-9	76-3	71-5	5-5	15
December	29-961	0-117	77-1	83-3	73-1	10-2	72-6	75-2	69-9	5-7	17
Mean	29-845	0-130	81-2	90-2	75-5	14-7	75-0	76-7	71-0	5-7	18
January	29-038	0-151	73-3	87-9	60-0	27-9	65-1	70-3	58-4	11-9	64
February	29-019	0-146	77-7	90-6	66-6	24-0	68-8	72-0	64-1	7-9	64
March	29-979	0-166	82-3	97-4	69-1	23-3	69-2	71-4	65-2	6-2	52
April	29-906	0-164	84-9	99-6	75-2	24-4	72-7	74-1	70-1	4-0	57
May	29-864	0-143	86-8	100-5	77-1	23-4	73-9	75-5	70-7	4-8	56
June	29-849	0-122	83-4	97-3	74-8	22-5	72-6	74-2	69-9	4-3	60
July	29-874	0-129	82-5	96-2	73-7	22-5	72-1	73-9	69-1	4-8	61
August	29-895	0-135	80-2	91-6	72-7	18-9	73-2	75-3	69-8	5-5	73
September	29-926	0-151	80-5	92-3	72-0	20-3	72-8	75-0	69-2	5-8	70
October	29-930	0-144	77-9	87-8	71-7	16-1	73-4	76-0	70-1	5-9	82
November	29-038	0-135	76-7	87-0	68-1	18-9	69-7	73-2	65-8	7-4	71
December	29-047	0-141	76-2	88-6	66-4	22-2	67-9	71-6	63-8	7-8	66
Mean	29-947	0-145	80-2	93-1	70-6	22-5	70-9	73-5	67-2	6-4	65
January	28-167	0-131	69-7	84-6	56-3	23-3	55-8	63-1	53-3	9-8	51
February	28-162	0-136	76-7	89-8	66-3	24-5	66-6	71-5	60-2	7-3	60
March	28-098	0-153	81-3	95-8	68-4	27-4	67-1	70-3	61-3	9-0	49
April	28-010	0-160	87-8	100-9	75-2	25-7	69-8	73-2	64-6	8-6	42
May	27-777	0-146	85-6	100-4	75-4	25-0	74-4	76-7	70-5	6-2	57
June	27-892	0-130	82-3	94-6	74-4	20-2	73-4	75-6	70-1	5-9	66

Mean Monthly Meteorological Results at the different Meteorological Stations in the Madras Presidency for the year 1872.

Station.	1872.	Barometer.		Dry Bulb Thermometer.				Wet Bulb Thermometer.		Humidity.	Sun Ther- mometer.		General Thermometer.	Wind.		Rain.		Clear Sky.	General Weather.
		Reduced to 32°.	Daily Range.	Mean.	Maxi. num.	Mini. num.	Range.	Mean.	Maxi. num.	Mini. num.	In Vacuo.	Ex- posed.		Daily Velo- city.	Mean Direction.	Amount.	Days.		
Secunderabad. (Contd.)	July	Inches. 27.898	Inches. 0.113	76.4	84.6	70.9	13.7	71.7	74.1	68.2	° 81	° 92.4	° 68.1	Miles. Points.	Points.	Inches.	No.	Cent.	Fine with passing clouds. Rainy till 7th; variable. Nearly clear till 27th. Showery till 6th, fine after. Overcast, except 17th to [23rd Cloudy.
	August	27.955	0.129	78.3	86.4	73.1	13.3	72.5	75.0	68.6	77	100.1	65.7	265	21 S.W. by W.	4.06	16	44	39
	September	27.994	0.133	76.0	85.3	69.6	15.7	71.7	73.9	68.1	82	103.4	65.7	...	25 W. by N.	5.17	16	45	48
	October	28.039	0.121	75.7	84.9	67.9	17.0	71.1	...	...	80	112.1	61.1	72	3 N.E. by N.	1.41	5	35	67
	November	28.119	0.134	71.9	84.3	60.3	24.0	68.5	...	...	73	110.7	51.0	79	6 E. N.E.	0.26	3	34	87
	December	28.195	0.142	70.4	83.2	58.9	24.3	65.2	...	...	77	106.3	49.4	61	6 E. N.E.	0.00	...	30	85
	Mean	28.027	0.135	77.6	89.6	68.0	21.6	69.2	72.6	64.9	66	107.2	61.9	186	15	21.21	71	34	68
	January	29.684	0.153	74.4	80.4	64.5	21.9	67.2	70.6	62.9	69	99.9	57.6	130	6 E. N.E.	0.00	...	40	73
	February	29.671	0.145	77.4	87.8	70.0	17.8	71.3	73.0	68.6	75	100.4	65.2	133	6 E. N.E.	4.82	6	47	55
	March	29.635	0.163	81.6	95.0	71.1	23.9	71.8	73.3	66.5	62	109.3	65.3	114	10 E. S. E.	0.00	...	32	79
	April	29.536	0.148	84.1	96.7	76.0	20.7	75.2	76.8	72.5	67	108.1	73.0	154	21 S.W. by W.	2.99	6	...	45
	May	29.515	0.137	87.0	99.5	78.2	21.3	75.6	76.9	73.0	60	113.8	75.0	161	17 S. by W.	2.59	2	...	39
	June	29.478	0.118	86.2	97.8	78.6	19.2	73.2	75.0	70.2	54	106.0	77.5	441	24 West.	0.00	...	25	25
Trichinopoly.	July	29.515	0.108	85.4	97.0	77.6	19.4	73.6	75.2	70.8	57	131.9	76.2	441	25 W. by N.	1.80	3	...	32
	August	29.545	0.125	83.4	94.2	76.1	18.1	73.5	75.2	70.8	63	130.3	74.4	229	25 W. by N.	5.34	8	...	27
	September	29.553	0.149	83.9	94.6	76.1	18.5	73.4	74.9	70.3	61	135.6	74.1	259	25 W. by N.	5.08	6	...	37
	October	29.556	0.138	79.3	88.0	74.0	14.0	74.0	71.5	...	79	132.6	72.2	131	26 W. N.W.	16.13	22	...	21
	November	29.677	0.121	77.5	85.9	72.2	13.7	72.2	74.7	69.7	78	137.0	66.6	...	2 N. N.E.	1.12	9	...	31
	December	29.697	0.134	76.5	86.2	70.2	16.0	70.0	72.5	67.4	72	137.5	...	168	3 N. E. by N.	0.59	2	...	54
	Mean	29.588	0.137	81.4	92.4	73.7	18.7	72.6	74.3	69.6	66	136.3	70.6	215	16 S.	40.46	64	39	43
Wellington.	January	24.229	0.076	54.9	67.6	44.2	23.4	45.9	53.6	38.7	58	82.2	...	14	11 S. E. by E.	0.00	...	68	80
	February	24.242	0.083	56.6	67.2	41.6	25.6	46.3	57.3	48.3	74	81.9	...	19	11 S. E. by E.	8.35	10	69	63
	March	24.244	0.074	61.5	72.4	45.8	26.6	47.6	53.0	47.6	61	83.0	...	16	12 S. E.	0.00	...	68	74
	April	24.207	0.085	64.0	75.0	55.8	19.2	56.8	59.7	52.5	67	89.3	...	16	6 E. N. E.	1.99	7	67	48
	May	24.169	0.077	64.7	73.8	57.8	16.0	59.2	61.6	54.7	72	88.8	...	13	10 E. S. E.	9.46	12	66	42
	June	24.135	0.061	63.4	72.2	57.3	15.5	57.3	59.1	54.0	75	84.5	...	24	26 W. N.W.	1.57	8	65	26
	July	24.146	0.058	62.3	70.1	58.3	11.8	56.7	58.5	53.9	73	81.6	...	26	25 W. by N.	3.20	10	65	15
	August	24.164	0.075	62.5	70.6	57.3	13.3	57.7	60.0	53.6	77	83.9	54.4	16	27 N.W. by W.	4.39	12	66	30
	September	24.189	0.079	62.3	70.4	56.9	13.5	57.1	59.6	52.9	75	85.3	54.2	12	26 W. N.W.	4.56	8	66	30
	October	24.181	0.089	60.9	68.3	56.5	11.8	57.5	60.3	53.7	83	83.7	54.5	12	29 N. W. by N.	7.41	16	66	15
	November	24.254	0.075	58.1	63.8	52.1	11.7	54.0	58.6	48.6	79	81.6	47.7	13	7 E. by N.	3.51	8	66	33
	December	24.253	0.076	55.8	65.6	47.6	18.0	51.7	58.2	44.6	78	81.3	43.7	14	16 South.	1.84	4	67	50
	Mean	24.201	0.076	60.8	69.8	54.1	15.7	55.1	58.6	50.3	73	84.2	60.9	16	17 S. by W.	46.28	95	67	41

Extreme Monthly Meteorological Records kept at the different Meteorological Stations in the Madras Presidency for the year 1878.

Station.	1873.	Barometer.			Dry Bulb Thermometer.			Wet Bulb.		Humidity.		Greatest Solar Heat.			Ground Thermo- meter.		Wind.		Rain.
		Highest.	Lowest.	Range.	Highest.	Lowest.	Range.	Lowest.	Highest.	Lowest.	Highest.	In Vacuo.	Freely exposed.	Lowest.	Highest.	Lowest.	Highest.		
Bangalore.	January	Inches. 27.134	26.875	1 0.259	84.9	17 48.4	16 36.5	46.5	17 22	6	138.1	24 138.1	100.8	6 40.8	16	40.8	16	...	...
	February	27.094	26.831	24 0.263	89.0	28 57.8	10 31.2	55.4	11 26	27	140.5	1 140.5	104.5	27 51.4	11	51.4	11	...	...
	March	27.063	26.839	13 0.223	94.5	25 58.8	12 35.7	53.2	12 20	11	149.4	7 149.4	107.9	7 63.3	23	63.3	23	...	...
	April	27.025	1 26.771	5 0.254	96.9	30 68.8	4 33.1	60.2	5 23	23	148.3	7 148.3	111.6	29 61.4	4	61.4	4	...	...
	May	27.034	26.670	30 0.364	97.1	24 67.1	28 30.0	61.0	22 24	21	153.6	15 153.6	113.7	23 65.2	19	65.2	19	...	...
	June	26.936	5 26.721	7 0.215	91.5	23 64.9	28 26.6	62.3	21 38	22	144.6	3 144.6	103.7	6 63.5	28	63.5	28	...	...
	July	26.992	30 26.750	4 0.242	89.5	27 63.4	21 26.1	60.4	10 43	9	140.6	27 140.6	100.9	27 62.0	10	62.0	10	...	...
	August	27.040	12 26.751	24 0.259	88.7	10 62.7	14 26.0	60.4	14 46	17	145.1	10 145.1	107.8	10 60.7	14	60.7	14	...	...
	September	27.016	11 26.793	2 0.223	86.7	16 62.3	16 24.4	60.4	16 41	14	145.7	17 145.7	105.4	29 59.8	16	59.8	16	...	...
	October	27.073	31 26.785	5 0.288	83.8	27 68.4	31 25.4	57.4	31 37	81	142.5	1 142.5	102.7	7 58.0	31	58.0	31	...	...
	November	27.136	17 26.866	29 0.270	83.1	9 56.8	1 26.3	53.1	4 32	4	141.8	24 141.8	98.6	24 45.9	3	45.9	3	...	...
	December	27.135	12 26.911	5 0.244	84.1	6 53.2	30 30.9	51.5	30 28	28	141.2	10 141.2	103.6	10 46.4	30	46.4	30	...	...
Bellary.	January	28.634	28.338	7 0.301	96.5	17 52.0	12 44.5	44.8	16 5	15	141.3	27 141.3	106.6	17 46.8	12	46.8	12	...	...
	February	28.527	28.271	27 0.256	106.6	26 67.3	11 39.3	56.3	22 9	6	159.3	27 159.3	118.0	26 64.9	11	64.9	11	...	...
	March	28.478	1 28.161	5 0.317	109.1	28 71.2	12 37.9	60.2	6 12	2	164.4	29 164.4	120.8	30 66.5	15	66.5	15	...	...
	April	28.505	9 28.069	28 0.436	110.1	24 71.5	15 38.6	60.2	6 12	2	166.9	7 166.9	122.5	17 66.9	15	66.9	15	...	...
	May	28.269	5 28.104	7 0.266	108.7	7 71.5	24 32.2	65.5	21 27	22	160.6	24 160.6	112.9	7 70.7	26	70.7	26	...	...
	June	28.427	28.157	4 0.270	96.8	26 73.3	28 23.5	64.9	9 36	31	151.4	6 151.4	107.1	26 69.5	14	69.5	14	...	...
	July	28.482	12 28.160	24 0.322	101.3	18 69.5	21 31.8	64.3	9 26	13	160.6	16 160.6	113.4	9 67.8	21	67.8	21	...	...
	August	28.470	17 28.215	1 0.255	96.9	11 68.9	21 28.0	65.2	8 31	10	156.2	17 156.2	109.9	17 67.3	21	67.3	21	...	...
	September	28.456	30 28.246	5 0.310	96.7	1 66.3	31 30.4	68.8	31 25	30	160.0	1 160.0	107.3	1 58.3	31	58.3	31	...	...
	October	28.568	17 28.348	29 0.310	91.4	11 57.3	4 34.1	50.0	23 13	4	138.6	29 138.6	105.3	1 51.3	4	51.3	4	...	...
	November	28.650	16 28.393	28 0.257	92.5	8 56.6	25 35.9	50.1	23 18	23	141.3	8 141.3	108.2	9 51.1	23	51.1	23	...	...
	December	28.650	16 28.393	28 0.257	92.5	8 56.6	25 35.9	50.1	23 18	23	141.3	8 141.3	108.2	9 51.1	23	51.1	23	...	...
Cochin.	January	29.928	29.568	25 0.355	93.6	17 74.0	29 19.6	70.5	61 16	16	143.6	23 143.6	...	...	...	...	...	...	...
	February	29.945	29.737	8 0.208	88.4	3 72.0	7 16.4	70.5	56 3	3	143.7	9 143.7	...	...	...	...	...	...	...
	March	29.968	29.777	19 0.211	87.6	10 70.9	4 16.7	71.3	12 71	9	143.7	18 143.7	...	...	...	...	...	...	...
	April	30.006	12 29.758	22 0.243	85.7	22 71.8	24 13.9	71.3	24 75	18	143.7	18 143.7	...	...	...	...	...	...	...
	May	30.083	9 29.820	27 0.213	86.7	21 71.1	20 15.6	69.8	20 69	26	143.8	7 143.8	...	...	...	...	...	...	...
	June	30.042	30 29.748	5 0.294	88.5	1 71.1	7 17.4	66.8	7 64	7	151.2	24 151.2	...	...	...	...	...	...	...
	July	30.053	7 29.780	29 0.273	91.3	22 70.9	19 20.4	67.5	19 56	20	158.3	22 158.3	...	...	...	...	...	...	...
	August	30.053	7 29.780	29 0.273	91.3	22 70.9	19 20.4	67.5	19 56	20	158.3	22 158.3	...	...	...	...	...	...	...
	September	30.053	7 29.780	29 0.273	91.3	22 70.9	19 20.4	67.5	19 56	20	158.3	22 158.3	...	...	...	...	...	...	...
	October	30.053	7 29.780	29 0.273	91.3	22 70.9	19 20.4	67.5	19 56	20	158.3	22 158.3	...	...	...	...	...	...	...
	November	30.053	7 29.780	29 0.273	91.3	22 70.9	19 20.4	67.5	19 56	20	158.3	22 158.3	...	...	...	...	...	...	...
	December	30.094	10 29.830	1 0.264	92.2	16 68.1	31 24.1	64.3	31 48	22	151.7	31 151.7	...	...	...	...	...	...	...

Extreme Monthly Meteorological Records kept at the different Meteorological Stations in the Madras Presidency for the year 1873.—(Continued.)

Station.	1873.	Barometer.				Dry Bulb Thermometer.				Wet Bulb.		Humidity		Greatest Solar Heat.				Ground Thermo- meter.		Wind.		Rain.		
		Highest.		Lowest.		Range.		Inches.		Day		°		°		°		°		Miles.			Day	
		Inches.	Day	Inches.	Day	Inches.	Day	°	Day	°	Day	°	Day	°	Day	°	Day	°	Day	Miles.	Day		Inches	Day
Columbatore.	January	28.742	23	28.454	1	0.288	91.0	18	55.6	17	35.4	47.1	17	19	17	47.0	17	140	14	13	6	0.00		
	February	28.697	10	28.389	24	0.308	95.2	24	59.8	11	35.4	57.7	11	22	22	53.5	11	230	2	30	3	0.40	7	
	March	28.667	18	28.399	13	0.268	100.4	25	63.2	24	37.2	56.0	11	17	22	54.8	24	136	10	57	2	0.00		
	April	28.622	1	28.318	4	0.304	99.9	16	66.5	22	33.4	64.2	2	31	1	64.2	3	187	14	43	18	0.99	21	
	May	28.613	10	28.250	26	0.263	99.4	5	70.8	20	28.6	66.4	30	31	6	66.5	10	237	30	48	9	1.09	26	
	June	28.527	24	28.320	1	0.207	95.7	22	68.7	28	27.0	63.5	28	...	...	66.5	3	...	...	...	...	...	...	
	July	28.577	30	28.339	20	0.238	91.4	30	68.3	26	23.1	58.5	21	42	9	64.3	21	352	2	143	1	0.28	15	
	August	28.606	14	28.318	23	0.288	92.1	15	69.1	25	23.0	65.1	25	52	28	65.2	31	276	24	102	21	1.18	20	
	September	28.607	8	28.379	1	0.228	92.9	8	66.2	16	26.7	63.3	16	41	13	63.2	16	330	21	76	30	1.90	28	
	October	28.677	31	28.348	6	0.329	94.5	30	67.3	22	27.2	64.2	22	43	2	64.3	3	224	13	34	30	2.87	6	
	November	28.737	16	28.413	29	0.324	91.9	29	63.1	19	28.8	59.8	20	38	19	59.4	19	176	16	26	2	0.45	16	
	December	28.762	10	28.467	2	0.285	90.1	1	55.5	27	34.6	50.2	27	26	30	49.4	27	140	22	24	6	0.09	18	
Kurnool.	January	29.186	23	28.882	7	0.304	97.3	17	52.6	12	44.7	45.9	12	17	17	44.9	12	176	6	64	13	0.00		
	February	29.155	3	28.822	24	0.333	101.4	27	63.2	1	38.2	56.8	2	18	28	58.1	1	126	4	62	16	0.00		
	March	29.075	12	28.796	27	0.279	107.1	25	63.2	12	43.9	56.9	8	18	21	63.9	8	173	17	86	4	0.00		
	April	29.013	1	28.679	5	0.334	111.7	30	73.9	3	37.8	61.9	24	18	23	71.1	4	278	13	83	12	0.09	13	
	May	29.000	11	28.577	31	0.423	110.6	1	72.2	13	38.4	61.4	5	16	3	69.8	22	221	12	79	1	1.77	30	
	June	28.887	21	28.606	8	0.281	101.8	7	70.3	8	31.5	66.9	8	32	6	67.5	21	...	...	...	...	2.32	8	
	July	28.952	30	28.645	4	0.307	97.4	16	71.1	3	26.3	67.0	12	37	28	69.4	26	...	...	...	...	0.68	16	
	August	29.034	12	28.662	23	0.372	99.5	13	69.5	4	30.0	65.7	17	31	13	67.9	11	...	...	...	...	1.01	3	
	September	29.001	9	28.697	3	0.304	98.0	30	69.0	9	29.0	65.5	9	39	29	68.0	30	571	16	127	31	2.27	18	
	October	29.112	31	28.775	5	0.337	99.2	9	63.6	31	35.6	58.0	31	30	30	60.4	31	206	2	62	15	1.17	21	
	November	29.225	17	28.892	29	0.333	91.6	9	55.0	22	36.6	49.3	22	20	23	49.6	21	207	26	76	11	0.29	5	
	December	29.220	16	28.930	4	0.290	91.6	11	58.3	28	33.3	52.8	28	24	6	53.0	27	240	8	58	22	0.00	0	
Madras.	January	30.109	23	29.847	7	0.262	87.5	31	60.9	17	26.6	60.3	17	53	30	52.2	17	189	22	68	5	0.01	25	
	February	30.081	4	29.775	24	0.306	94.7	23	65.4	27	29.3	63.9	27	42	25	57.4	27	313	3	76	21	4.63	4	
	March	30.031	16	29.784	27	0.237	91.5	24	65.3	12	26.2	63.6	12	41	11	59.5	2	203	26	105	9	...	...	
	April	29.961	1	29.656	4	0.305	102.3	15	73.6	4	28.7	71.0	4	44	15	71.4	1	294	29	111	1	1.07	3	
	May	29.969	9	29.499	30	0.470	102.3	2	75.4	19	26.9	73.1	20	41	30	71.2	19	353	29	120	19	0.02	26	
	June	29.785	24	29.533	1	0.252	106.3	1	77.0	25	29.3	70.9	5	33	11	74.3	10	332	2	171	24	0.84	24	
	July	29.869	30	29.544	19	0.325	103.9	17	75.8	29	28.1	66.5	10	33	11	73.4	4	275	13	162	30	0.36	5	
	August	29.921	12	29.568	24	0.353	99.1	31	74.2	3	24.9	70.5	30	30	30	71.9	2	275	27	79	25	1.22	22	
	September	29.933	27	29.642	3	0.291	101.9	13	72.2	23	29.7	69.2	15	39	15	70.3	23	263	5	79	18	1.16	21	
	October	29.993	31	29.683	4	0.310	95.2	1	70.6	34	24.6	69.6	31	45	31	65.3	31	258	16	72	23	1.82	13	
	November	30.093	17	29.783	28	0.310	89.4	10	64.0	3	25.4	61.7	2	30	2	57.3	3	356	20	83	6	3.02	28	
	December	30.111	10	29.841	2	0.270	87.7	7	61.2	29	26.6	60.2	29	50	29	53.9	29	283	23	65	9	6.57	1	

Madura.	January	29-614	28	29-348	13	0-266	90-7	17	60-4	17	30-3	58-2	17	29	17	147-5	17	110-0	31	53-4	17	194	21	56	19	0-00	...	3
	February	29-577	7	29-293	24	0-285	95-2	21	68-8	27	31-4	61-3	22	34	24	145-0	22	...	...	59-6	12	182	21	49	23	0-60	...	...
	March	29-555	21	29-270	25	0-285	98-4	23	66-4	1	32-0	62-0	28	30	1	146-9	28	...	...	61-0	1	225	17	50	20	0-00	...	...
	April	29-474	19	29-191	4	0-283	102-9	16	69-4	20	33-5	68-4	19	38	16	148-9	19	...	...	66-5	20	128	18	39	30	3-50	...	19
	May	29-499	10	29-154	26	0-845	103-9	24	72-8	28	31-1	70-6	22	35	3	148-9	22	...	...	71-0	20	122	12	41	31	4-50	...	25
	June	29-386	25	29-187	8	0-199	103-8	26	74-4	5	23-4	69-3	30	43	19	145-9	30	...	...	71-2	6	220	26	59	4	0-32	...	4
	July	29-431	30	29-176	20	0-255	102-9	25	71-7	29	31-2	...	...	...	...	149-9	15	...	...	71-4	16	...	...	...	...	1-60	...	15
	August	29-498	12	29-200	23	0-238	101-9	15	71-6	16	30-9	...	...	...	...	150-7	8	...	...	72-4	22	164	4	43	25	1-25	...	18
	September	29-467	9	29-235	4	0-232	102-4	15	73-5	19	29-9	69-4	...	...	...	146-4	6	...	...	71-5	22	91	13	33	20	1-45	...	7
	October	29-540	31	29-220	6	0-320	98-9	1	71-4	31	27-5	67-4	...	...	...	147-0	4	...	...	69-1	26	182	19	31	6	2-60	...	6
	November	29-585	17	29-300	29	0-285	92-4	4	69-4	19	23-0	62-4	...	...	...	145-5	2	...	...	59-4	31	226	16	38	8	1-10	...	3
	December	29-637	10	29-348	2	0-279	91-9	2	63-5	31	28-4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Masulipatam.	January	30-130	23	29-845	7	0-286	87-8	16	60-3	15	27-5	57-5	25	39	16	152-6	25	103-1	10	51-7	7	20	13	10	5	0-00	...	...
	February	30-089	3	29-750	24	0-849	95-9	23	65-3	20	30-6	62-5	23	39	23	156-0	23	110-2	23	58-3	10	33	3	12	23	0-08	...	4
	March	30-017	17	29-770	13	0-247	97-7	25	72-0	17	30-7	64-3	8	47	23	164-9	8	112-5	25	58-9	17	30	22	12	9	0-00	...	...
	April	29-949	1	29-587	15	0-363	108-0	15	67-3	1	35-7	67-6	21	22	15	166-8	21	121-0	16	66-3	1	36	29	17	2	0-54	...	21
	May	29-950	9	29-435	30	0-515	106-1	29	74-3	31	31-8	70-0	3	41	29	165-4	29	121-2	29	68-8	18	34	29	12	9	0-15	...	27
	June	29-709	24	29-462	8	0-247	106-7	25	78-2	9	30-5	70-2	23	26	25	168-4	1	132-9	4	74-1	20	34	25	15	9	1-08	...	8
	July	29-781	30	29-470	19	0-311	101-5	30	75-4	9	26-1	70-3	30	36	26	161-9	30	118-2	30	72-2	9	36	17	15	29	0-65	...	16
	August	29-881	12	29-536	5	0-345	99-6	13	74-0	4	25-6	69-4	18	45	15	164-4	12	114-9	15	70-5	18	34	28	12	24	1-35	...	3
	September	29-865	19	29-559	1	0-306	98-1	14	75-2	29	23-9	70-7	7	37	10	164-2	24	115-7	23	70-1	10	34	1	8	20	0-55	...	1
	October	29-994	30	29-679	12	0-316	94-8	1	69-0	31	25-8	66-2	31	34	30	159-3	12	116-7	1	62-3	31	30	9	7	3	2-08	...	11
	November	30-136	16	29-823	4	0-313	88-5	6	65-6	22	22-9	60-4	3	34	1	160-0	7	107-4	7	57-8	21	45	27	10	1	2-81	...	27
	December	30-148	16	29-841	5	0-307	86-0	10	60-8	25	25-2	58-0	25	42	24	156-8	10	104-7	10	52-3	25	30	15	10	10	0-05	...	5
Mogulpatam.	January	30-088	23	29-824	2	0-284	85-4	25	63-2	18	22-3	61-4	19	59	15	150-5	19	101-7	29	56-0	18	268	9	47	17	0-00	...	...
	February	30-047	10	29-763	24	0-284	88-5	24	67-0	27	21-5	64-2	5	54	26	150-8	5	103-6	23	61-0	27	294	1	44	22	2-41	...	2
	March	30-017	21	29-778	27	0-239	89-7	27	67-5	2	22-2	64-0	8	...	...	155-9	80	105-0	31	61-7	2	149	11	66	8	0-00	...	...
	April	29-949	1	29-650	5	0-239	98-8	15	69-8	6	29-0	68-8	23	53	31	153-1	23	115-6	15	70-2	20	261	17	96	9	4-58	...	3
	May	29-967	9	29-561	31	0-406	103-0	23	73-7	10	29-8	71-7	20	54	20	156-3	20	115-3	21	69-7	11	306	30	64	25	1-24	...	26
	June	29-817	25	29-583	1	0-234	102-8	19	75-4	5	27-4	...	...	...	...	153-9	29	112-1	23	71-0	6	390	27	204	24	0-82	...	4
	July	29-878	30	29-575	19	0-303	103-2	16	75-0	10	28-2	...	...	...	...	155-8	11	114-2	8	71-0	28	244	4	108	10	1-72	...	18
	August	29-932	13	29-625	24	0-307	100-5	17	73-9	19	26-6	70-2	29	42	4	160-3	4	113-0	9	71-4	24	260	2	84	36	2-02	...	20
	September	29-923	7	29-679	1	0-244	100-0	13	73-3	24	26-7	...	...	...	...	156-9	5	108-9	4	70-8	22	171	1	60	17	4-50	...	8
	October	29-939	31	29-632	5	0-317	92-9	1	72-8	19	20-1	...	...	...	...	159-9	8	108-9	5	61-6	3	239	18	52	4	2-92	...	12
	November	30-047	17	29-759	28	0-288	89-6	4	70-5	2	19-1	66-4	2	50	2	159-9	7	105-3	6	60-3	29	348	23	53	9	2-60	...	18
	December	30-108	10	29-824	4	0-284	89-0	6	65-8	80	23-2	63-2	30	66	30	148-1	7	105-3	6	...	...	...	...	...	...	...	...	...
Salem.	January	29-190	28	28-908	7	0-283	92-7	17	52-3	17	40-4	50-7	19	24	18	147-6	19	119-1	19	45-3	17	166	24	60	17	0-00	...	...
	February	29-154	9	28-833	24	0-321	97-8	24	60-5	11	37-3	58-7	25	27	26	145-4	25	128-9	28	55-1	11	171	17	66	4	0-58	...	4
	March	29-105	21	28-844	13	0-261	102-9	25	62-4	2	40-5	55-9	11	20	22	148-7	25	128-9	25	53-9	2	202	10	81	26	0-00	...	...
	April	29-088	1	28-4719	5	0-339	105-3	28	70-3	20	35-0	66-7	20	24	28	149-5	28	128-3	27	65-2	20	164	1	49	17	1-02	...	6
	May	29-054	9	28-661	30	0-893	106-2	23	72-6	14	33-6	65-4	21	23	23	150-3	21	135-5	23	69-5	14	233	9	75	21	0-76	...	25
	June	28-952	24	28-697	1	0-255	101-4	18	71-2	6	30-2	66-7	13	24	20	148-8	24	125-8	12	66-7	28	237	9	107	8	0-99	...	4
	July	29-017	30	28-719	19	0-298	100-4	21	71-5	29	28-9	65-7	21	24	9	...	...	125-8	12	66-7	31	189	29	52	13	1-84	...	29
	August	22-040	12	28-740	23	0-300	96-9	19	69-7	16	27-2	68-0	...	...	...	...	...	117-9	11	67-4	31	189	29	52	13	1-80	...	16
	September	29-057	8	28-793	4	0-264	97-1	17	69-6	24	27-5	67-0	16	35	15	...	...	120-4	20	64-6	16	160	2	53	30	2-00	...	28
	October	29-104	30	28-780	5	0-324	93-1	28	69-4	4	23-7	67-5	4	46	31	...	...	120-4	1	58-9	22	86	12	25	4	2-96	...	5
	November	29-165	7	28-867	29	0-308	92-1	5	62-7	2	29-4	60-9	2	40	28	162-2	11	...	...	57-6	30	160	23	41	6	0-20	...	13
	December	29-190	10	28-911	2	0-279	91-5	4	57-8	30	33-7	54-8	9	34	28	162-1	9	...	...	50-6	...	...	...	...	...	0-02	...	6

Extreme Monthly Meteorological Records kept at the different Meteorological Stations in the Madras Presidency for the year 1873.

Station.	1873.	Barometer.			Dry Bulb Thermometer.			Wet Bulb.		Humidity		Greatest Solar Heat.			Ground Thermo- meter.		Wind.		Rain.						
		Highest.		Lowest.	Range.		Highest.		Lowest.	Range.	Lowest.		In Vacuo.		Freely exposed.		Lowest.			Highest.	Lowest.	Greatest Fall.			
		Inches.	Day.	Inches.	Day.	°	Day.	°	Day.	°	Day.	°	Day.	°	Day.	°	Day.	Miles.		Day.	Miles.	Day.	Inches.	Day.	
Secunderabad.	January ...	28-327	23	28-039	6	0-288	18	47-9	15	42-6	26	27-5	13	...	...	...	...	...	...	...	...	...	0-00	...	
	February ...	28-318	3	27-988	24	0-330	15	60-6	3	37-8	10	52-6	3	...	...	...	...	...	...	...	...	...	0-00	...	
	March ...	28-236	30	27-964	27	0-272	24	62-9	8	41-5	24	55-3	8	367	17	71	23	30	70	12	0-11	...	...		
	April ...	28-187	1	27-858	5	0-329	26	68-3	2	38-0	20	64-4	2	...	...	...	...	...	...	...	...	...	0-01	...	
	May ...	28-186	9	27-709	30	0-477	23	70-9	9	34-7	12	68-2	7	374	30	70	12	0-11	...	...	...	...	...		
	June ...	28-009	24	27-754	1	0-255	23	70-3	30	28-5	17	66-5	23	...	...	...	...	...	...	...	...	...	1-92	...	
	July ...	28-065	30	27-757	19	0-308	7	69-1	9	21-6	17	63-9	9	...	...	...	...	...	...	...	...	...	0-80	...	
	August ...	28-144	12	27-802	25	0-312	14	68-3	31	27-5	16	64-2	9	...	...	...	...	...	...	...	...	...	1-20	...	
	September ...	28-122	18	27-821	4	0-301	22	66-1	7	23-3	30	62-5	29	...	...	...	...	...	...	...	...	...	1-97	...	
	October ...	28-240	30	27-936	12	0-304	30	66-1	30	33-6	31	52-1	31	163	7	11	30	0-77	...	...	...	...	...	...	
	November ...	28-353	16	28-051	28	0-302	89-7	52-7	24	37-0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	December ...	28-360	16	28-046	7	0-314	87-5	53-9	31	33-6	2	43-8	30	183	7	16	13	...	...	...	...	...	...	0	...
Trichinopoly.	January ...	29-831	19	29-529	2	0-302	18	60-1	17	29-4	31	51-9	16	230	10	37	16	...	...	...	...	...	...	0-00	...
	February ...	29-816	8	29-471	24	0-345	24	61-5	27	29-5	1	57-2	27	246	1	31	27	...	...	...	...	...	...	1-88	...
	March ...	29-750	18	29-471	27	0-279	25	66-1	1	33-4	29	58-4	2	177	29	17	24	...	...	...	...	...	...	0-00	...
	April ...	29-677	1	29-342	5	0-335	15	69-2	7	34-2	26	70-0	4	262	14	80	19	...	...	...	...	...	...	0-97	...
	May ...	29-738	9	29-317	29	0-431	106-7	74-4	26	32-3	17	71-8	15	269	26	98	16	...	...	...	...	...	...	2-20	...
	June ...	29-612	13	29-326	7	0-286	101-0	74-2	26	26-8	11	73-5	1	572	12	275	28	...	...	...	...	...	...	0-00	...
	July ...	29-667	31	29-369	16	0-298	100-0	72-7	29	27-3	26	71-5	13	727	19	216	28	...	...	...	...	...	...	1-52	...
	August ...	29-711	12	29-378	24	0-333	102-0	70-6	15	31-4	26	70-4	20	615	5	53	29	...	...	...	...	...	...	2-60	...
	September ...	29-679	8	29-428	22	0-251	99-0	72-4	19	26-6	9	71-4	18	617	2	90	29	...	...	...	...	...	...	3-11	...
	October ...	29-738	31	29-387	12	0-351	97-2	70-3	30	26-9	...	59-3	2	...	...	...	...	...	...	...	...	...	...	0-37	...
	November ...	29-804	17	29-499	28	0-305	89-4	69-3	2	20-1	30	...	...	...	...	...	...	...	...	...	...	...	...	0-46	...
	December ...	29-863	16	29-554	2	0-309	98-5	61-5	31	29-0	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wellington.	January ...	24-321	16	24-124	1	0-197	71-9	39-3	15	32-6	19	87-6	15	25	27	10	2	...	...	...	...	...	...	0-00	...
	February ...	24-318	13	24-150	24	0-168	72-6	45-7	1	26-9	17	88-1	7	45	12	10	8	...	...	...	...	...	...	3-20	...
	March ...	24-326	25	24-151	3	0-175	77-2	46-7	3	30-5	17	91-8	30	35	22	10	1	...	...	...	...	...	...	0-00	...
	April ...	24-300	20	24-088	5	0-212	79-1	52-8	3	26-3	1	97-5	30	37	4	10	8	...	...	...	...	...	...	0-95	...
	May ...	24-297	9	23-927	26	0-370	78-0	53-8	14	24-2	12	95-5	23	50	26	10	1	...	...	...	...	...	...	4-70	...
	June ...	24-195	6	24-043	8	0-152	76-1	50-8	21	25-3	6	91-8	19	45	11	10	2	...	...	...	...	...	...	0-66	...
	July ...	24-242	30	24-051	4	0-191	77-9	44-3	9	23-6	30	88-5	30	53	20	10	6	...	...	...	...	...	...	0-91	...
	August ...	24-292	12	24-034	23	0-258	74-7	53-8	15	20-9	9	49-5	13	40	27	10	6	...	...	...	...	...	...	2-03	...
	September ...	24-273	7	24-097	2	0-176	76-1	49-8	15	26-3	13	46-5	17	20	14	10	6	...	...	...	...	...	...	1-45	...
	October ...	24-299	30	24-073	5	0-286	72-2	52-6	27	19-6	5	90-0	5	20	4	10	1	...	...	...	...	...	...	1-05	...
	November ...	24-370	9	24-110	28	0-260	...	43-8	19	...	15	86-6	15	23	16	10	1	...	...	...	...	...	...	1-00	...
	December ...	24-364	10	24-174	5	0-180	72-9	34-7	27	38-2	23	88-6	1	20	22	10	1	...	...	...	...	...	...	0-70	...

SECTION IV.

PRICES OF FOOD.

411. The following table shows the average prices of the staple food grains in the several districts for each month of the year. The figures indicate the number of standard *seers* purchasable for one rupee. From this table we see that rice, in most of the districts, was rather dearer in the end of the year than in the beginning; that with regard to dry cereals, cholum and raggy, prices had generally advanced at the end of the year in a higher ratio than rice. This was no doubt due in some degree to the irregularity and uncertain character of the rainfall being unfavorable to the dry crops in certain parts of the country. Thus in Trichinopoly raggy which could be bought in January at 36·1 seers for the rupee, in December was valued at 27·2 seers for the rupee, while cholum, another dry grain staple, had risen from 31 to 22 seers for the rupee. The increase in the price of the dry cereals is of greater moment to the poor than a slightly enhanced value of rice, because four-fifths of the poorer classes of this Presidency depend upon the dry cereals, and not on rice, for their nutriment. The famine in Bengal has had the effect of increasing the activity of the export rice trade, and has probably tended to the rise in prices in Southern India; but, so far as can be ascertained, the rice crops in Southern India during 1873 were fair average crops, and the yield equal to more than local consumption. The dry cereals, pulses, &c., did, however, undoubtedly fall short of average crops in some districts, and hence the almost universal rise in prices towards the end of the year.

412. In Vizagapatam raggy and cholum were cheaper at the end of the year than at the beginning, and in Bellary, a great dry grain district, prices had remained stationary; but in all other districts there was a distinct advance in the prices of dry cereals, an advance which seems likely to continue during the present year, and which, with the active exports of rice to famine districts, will probably tend to the pinching of the poorer classes in this Presidency, and thus affect the public health.

Average Number of Imperial Sorts of Grain per Rupee in the Districts of the Madras Presidency

Districts.	2ND SORT RICE.												CHORUM.												RAGOR.															
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Average.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Average.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Average.	
Ganjam	23.6	24.3	25.8	26.2	26.7	25.6	25.3	23.1	21.2	25.9	25.3	21.3	24.8	35.7	37.7	36.1	32.8	34.5	32.4	30.7	29.6	30.1	30.0	30.6	28.6	32.4	39.9	37.7	35.6	34.6	34.9	32.9	33.4	29.2	32.0	40.7	40.8	36.8	35.7	
Vizagapatam.	16.1	18.2	24.4	23.1	23.3	23.1	23.2	21.4	20.3	21.0	22.0	21.3	21.4	25.2	30.2	39.6	59.1	39.2	37.5	36.6	36.0	34.2	35.4	38.7	38.2	37.5	25.7	28.0	34.5	34.6	34.3	33.6	30.7	29.6	30.8	35.8	37.4	35.6	32.5	
Godavery	20.2	...	16.4	19.2	19.1	18.6	18.0	17.4	17.6	17.9	18.3	17.8	18.2	27.8	...	26.5	27.7	26.8	26.7	25.6	25.0	24.6	25.4	25.4	26.1	36.7	...	...	29.7	30.8	31.4	30.4	30.5	29.5	29.5	30.0	30.8	31.0	30.9	
Kistna	13.0	13.2	15.1	14.8	14.7	14.3	13.6	13.1	13.2	13.5	14.0	14.1	13.9	18.0	16.9	19.9	20.0	19.6	19.6	18.0	17.1	16.9	17.5	17.8	20.2	18.4	24.2	24.0	25.9	25.8	27.9	27.0	24.6	22.5	19.7	19.8	21.2	23.9	23.9	
Nellore	15.6	16.2	19.1	15.8	15.2	15.3	17.4	15.9	15.4	15.1	15.1	15.0	15.9	26.6	28.3	32.7	26.6	23.9	22.9	23.6	22.5	19.9	19.9	19.3	18.4	23.7	31.9	31.4	36.8	29.4	28.1	27.7	28.6	26.0	23.5	23.0	22.0	21.5	27.5	
Cuddapah	13.3	13.0	15.0	15.1	15.6	14.5	14.3	15.4	13.8	14.1	14.2	14.1	14.4	22.5	22.1	26.6	26.0	26.1	23.7	22.5	22.9	20.9	20.5	21.7	22.3	23.1	26.0	25.7	28.8	29.3	29.9	26.8	26.1	26.3	23.7	24.1	25.0	24.8	26.4	
Bellary	13.2	13.1	14.6	14.7	15.3	15.1	16.0	14.5	14.5	14.5	14.4	14.5	14.5	26.8	26.7	30.4	30.6	30.1	29.2	27.4	25.9	25.4	25.7	26.3	26.1	27.5	30.2	32.9	31.8	35.0	35.5	35.0	32.4	31.0	29.3	29.1	30.9	30.7	32.2	
Kurnool	13.6	12.5	11.9	12.2	12.5	12.4	12.4	12.1	12.3	12.4	12.1	12.3	12.4	26.0	24.4	24.9	24.6	24.3	24.5	23.1	21.8	20.5	21.8	22.6	23.3	23.5	26.2	28.3	28.0	27.8	28.2	28.3	28.0	27.6	22.9	25.7	24.0	25.1	26.7	
Madras	14.1	14.1	14.7	15.2	15.4	15.7	14.0	13.9	13.7	13.7	13.7	13.0	14.3	29.3	23.5	19.3	23.6	23.8	23.7	22.1	21.1	18.3	21.0	21.0	22.3	23.1	31.4	31.4	29.1	26.3	26.5	25.6	25.0	23.7	24.1	23.6	23.7	23.7	26.2	
Chingleput	16.1	16.7	19.0	19.9	19.8	19.8	18.2	17.4	16.9	16.7	16.5	15.6	17.7	20.0	20.0	19.9	20.1	20.8	20.9	21.6	21.6	21.3	19.1	21.6	...	20.6	28.4	27.6	29.4	29.1	28.7	29.5	26.0	24.9	23.9	24.2	24.7	24.1	26.7	
North Arcot.	18.5	17.8	19.7	20.5	20.7	20.6	18.9	18.0	20.6	18.2	18.2	16.4	19.0	30.0	29.1	30.4	32.2	32.7	29.5	28.5	29.2	28.0	27.8	24.4	23.3	28.7	35.1	33.4	34.0	34.7	36.0	34.0	30.6	28.2	28.5	29.2	29.8	25.9	31.6	
South Arcot.	17.2	16.9	20.1	19.6	19.2	19.7	18.6	17.8	17.7	17.2	17.0	15.8	18.1	39.1	36.4	41.8	41.8	41.6	33.7	26.2	24.4	24.8	24.5	26.0	25.9	32.2	32.3	31.1	33.9	33.1	31.9	29.7	27.7	24.8	25.4	26.8	26.6	25.1	29.0	
Tanjore	17.0	17.9	15.9	15.3	15.2	15.0	14.5	14.2	14.2	15.0	15.8	14.7	15.4	25.4	30.7	25.8	23.2	26.6	23.3	21.8	19.4	24.7	20.9	27.1	28.9	24.8	34.3	34.8	32.5	30.4	28.6	26.0	23.2	24.8	26.9	26.5	29.5	31.6	29.1	
Trichinopoly.	16.1	16.8	17.2	16.1	15.6	15.1	15.0	15.0	14.9	14.8	15.2	15.0	15.6	31.4	34.8	31.4	31.1	30.5	24.4	22.9	22.3	21.0	20.3	21.0	22.3	26.1	36.1	35.4	31.6	30.4	29.4	27.2	26.6	24.7	24.4	25.8	27.1	27.2	28.8	
Madura	13.4	13.6	15.6	15.6	15.7	15.6	15.6	15.5	15.3	14.8	14.6	14.4	15.0	34.0	32.6	35.3	35.2	35.6	36.1	36.3	36.2	34.5	32.5	32.2	31.5	34.3	34.0	31.4	35.6	36.2	35.5	33.4	33.4	32.1	32.7	31.3	30.8	31.7	33.2	
Tinnevely	12.5	12.5	13.9	13.9	13.8	13.3	13.1	13.3	13.0	13.3	13.1	12.1	13.1	21.9	24.4	22.3	25.5	25.5	25.7	25.5	24.9	25.1	25.0	23.3	21.7	24.2	28.3	27.0	27.4	26.6	25.5	24.7	24.2	23.3	24.3	24.6	23.9	26.0	25.4	
Coimbatore...	12.9	13.0	14.7	14.4	10.3	14.1	13.5	13.4	13.4	13.4	14.0	13.7	13.4	23.4	22.8	27.0	24.7	20.6	21.8	21.1	19.6	19.7	19.9	21.6	20.9	21.9	30.6	28.7	31.7	30.3	24.6	29.0	26.0	25.6	24.3	25.8	28.6	29.4	27.9	
Neigherries..	9.7	9.7	9.9	10.4	9.9	9.6	9.7	9.2	9.7	9.4	9.6	9.9	9.7	18.0	16.4	20.2	19.1	16.2	16.1	16.9	17.8	17.1	16.2	16.3	17.1	17.3	21.2	20.9	20.1	20.7	19.6	18.7	18.4	18.4	17.7	16.5	18.1	19.8	19.2	
Salem	16.8	16.6	15.9	16.5	17.3	16.2	14.3	14.5	14.9	15.5	15.3	15.3	15.7	29.3	29.3	28.1	27.4	26.5	30.7	24.4	25.6	23.0	26.3	25.4	25.3	26.8	37.3	34.1	31.5	33.1	30.1	37.0	28.3	19.2	29.0	30.8	31.2	30.3	31.0	
South Canara	14.3	14.7	15.6	14.6	14.2	13.8	13.1	13.0	13.5	13.9	14.2	14.2	14.1	...	...	...	...	...	...	...	...	...	...	...	...	...	26.2	25.1	23.1	22.0	22.9	21.4	20.9	20.6	20.7	20.2	20.4	22.2	22.1	
Malabar	12.9	13.7	13.6	13.3	13.0	13.1	13.3	13.2	13.9	13.7	14.0	13.0	13.4	...	...	...	...	...	...	...	...	...	...	...	...	...	20.8	29.1	17.2	24.4	22.5	15.9	22.0	23.2	22.9	18.7	23.6	22.3	22.8	22.0

SECTION V.

RECORD OF PERSONAL PROCEEDINGS.

413. As explained in the report of 1872, I had been requested by Government to undertake the superintendence of the tabulation of the Census schedules of the Presidency in addition to my current duties, and this special work necessitated my presence in Madras for almost the whole of the year 1873. The first volume of the printed Census tables, including my report, was despatched to Government in December 1873, and a second volume of tables is now nearly ready for issue. My duties in connexion with the Census Office were, therefore, practically completed by the end of 1873.

414. In the month of January 1873, I was desired by Government to proceed to Cannanore to ascertain how far any insanitary conditions of the barracks or station of Cannanore might have contributed to the outbreak of typhoid fever in Her Majesty's 43rd Regiment, recently arrived from England. I had the advantage of meeting Dr. Massy, C.B., Deputy Surgeon-General, Mysore Division, and of inspecting with him the barracks and surrounding area, and of obtaining the weight of his support in recommendations for the sanitary improvement of the barracks and neighbourhood. On our recommendation Government has been pleased to insist upon the inclusion of the private property of the Beebe of Cannanore within the area of municipal control, so that the nuisances arising on such property will hereafter be dealt with promptly by the municipal authorities.

On the occasion of this visit to Cannanore I inspected the Military and Civil establishments generally of the station, and the same at Calicut on my return.

415. In November I visited Coimbatore, in reference to an outbreak of sickness in the Central and District Jails, and subsequently proceeded to Trichinopoly, Vellore, and Chittoor, in reference to certain questions connected with the health of prisoners in jail. These were all the tours made in the course of the year, my time being so fully taken up in the supervision of the large establishment of the Census Office, and in the compilation and revision for the press of the Census report and tables.

416. By G. O. No. 975, of 12th July 1873, the Sanitary Commissioner was appointed a member of a committee for the revision of the Municipal Act for the town of Madras. The committee commenced its sittings in August, and met once a week regularly, until the end of the year, when its labors were still unfinished.

417. By G. O. No. 921, of 18th September 1873, I was also nominated a member of a committee for the re-organization of establishments for the General Hospital, Madras. This committee began its labors in October, and did not complete them before March 1874, meeting weekly for the transaction of business.

418. During the year also the Sanitary Commissioner was nominated a member of a committee for the selection of a site for a **Military Hospital, Madras.** European Military Hospital in Madras. This question has been recently decided by Government, the committee having finally chosen an excellent site on the sea beach, now occupied by the Public Works Department Workshops, and which will be suitable both as a marine sanitarium for up-country invalids, and for the sick of the corps in garrison.

SECTION VI.

SANITARY PROGRESS.

419. The sanitary work done in a single year bears but a small proportion to the work requiring to be done, but still, on the whole, it is satisfactory to note that we are not standing still, even if our progress is not so rapid as the most earnest reformers could desire.

Working of the Local Funds Acts. 420. As regards our Local Funds administration, there has not been so much done as was at one time expected.

The Local Funds Act of 1870 contemplated the imposition of a house-tax to meet the special needs of educational and sanitary expenditure, but it has not been thought advisable to resort to this method of raising money, and consequently the expenses connected with education and sanitary improvements have to be met out of the general funds of the Local Boards, which funds are mainly raised from an addition of one anna to the rupee of land assessment.

In all the Local Fund circles some provision is made in the annual estimates for sanitary works, such as cleansing and deepening of public wells and tanks, drainage and improvement of village sites, scavengering small towns, &c., and the moneys so set aside are usually spent in works of improvement, but they necessarily are inadequate to the general sanitary improvement of whole circles. Here and there a village tank may be cleaned, a new well built, or streets supplied with public scavengers, but the means at disposal do not permit of these things being done on a systematic plan.

I have already recommended to the Board of Revenue the establishment of the principle of expending the sanitary allotments, preferentially, in the form of grants-in-aid to towns and villages which undertake to tax themselves to meet a moiety of the cost of the desired works. In this way the amount of money appropriated for sanitary works will be made to go much further, and the fact of communities expressing their readiness to find a portion of the funds out of their own pockets will be a guarantee for economical expenditure, and also for the appreciation of the work by the people.

Municipal Towns. 421. The municipal system has not made much growth in Madras. In the beginning of the year there were 46 towns under municipal government, and only one town has been added to the list during the year.

The progress of municipalities in sanitary improvements would be more marked but for the fact that their resources are so crippled. The people are

poor, and the utmost that local taxation by municipalities has extracted from the inhabitants does not quite average two shillings per head of the town populations. It will be obvious from these figures that when ordinary provision has been made for the repair of roads, lighting, conservancy, primary education, and medical aid to the poor, very little remains for expenditure on works of permanent improvement. During the past year, moreover, intimation has been given by the Government that the tax "on trades and professions" must in future be abandoned, so that the towns will in future have to still further curtail their expenditure, or to resort to new methods of raising money.

If the municipal system is to expand, so as to include all the town populations for which it is adapted, it will be advisable to permit a certain latitude of action, as to the raising of ways and means. A tax that may be unsuitable in one locality may be well adapted for another, and it would seem to be unadvisable to draw a hard and fast line in this respect. In the North-West Provinces, and other parts of India, the chief source of municipal revenue is an *octroi* duty on certain articles of common consumption, but this source of revenue has been, as yet, untried in the Madras Presidency.

422. The Census of the Presidency shows us that in 1871 there were 403 towns or villages with populations of more than 5,000 and less than 10,000 inhabitants, 52 towns of more than 10,000 and less than 15,000, 14 towns with populations of from 15,000 to 20,000, 27 with populations of from 20,000 to 50,000, and six with populations over 50,000 persons; and to most of these groups of population the principles of municipal self-government, as regards sanitary questions, are applicable. But taking only the places with 10,000 and upwards of inhabitants, there are 99 towns that it would be proper to place under municipal control, instead of the existing number of 46. If we deduct the *Amshoms* (large village areas of scattered population) of Malabar, there are about 300 large villages and towns in this Presidency of more than 5,000 inhabitants which ought to be self-dependent for the means of cleanliness. In a large number of these towns and villages the chief requirements are scavengering and good water, and these objects might probably be secured by some simple form of local taxation.

423. But while on public grounds it would seem desirable to extend the system of municipal taxation, it must be borne in view that we have to deal with a people who are very ignorant and very poor, and who are mainly devoid of that form of public spirit which enables communities to bear with equanimity the burden of local taxes for local objects.

To establish municipal institutions in places where there are no educated men, or leaders of public opinion, would assuredly end in failure, and I should myself prefer to see the gradual development of the system, rather than run the risk of defeating our objects by a too hasty organization of municipal establishments amongst communities that are unable to appreciate them at their right value.

424. I shall now notice briefly the leading features of the various municipal towns during the past year.

Progress in existing Municipalities.

Berhampore.

Population	...	...	...	21,670
Births registered	...	...	...	369, or 17·02 per mille.
Deaths do.	...	...	...	402, or 18·55 „
Vaccinated	...	...	...	157, or 7·24 „
Estimated income	...	...	...	Rs. 19,750, or 0-14-6 per head.
Do. expenditure	...	...	...	„ 18,870
Do. do. for sanitary purposes	...	...	...	„ 12,610

425. During the year V-shaped cut stone drains, to the extent of 1,857 yards, were constructed, five new roads were completed, and two are under construction. A trench latrine was introduced for the use of the regiment, as an experimental measure, and has been found to be useful.

426. The public health in the town was fairly good during the year. No cholera prevailed. Vaccination was but indifferently carried out.

Chicacole.

Population	...	...	...	15,587
Births registered	...	...	...	361, or 23·1 per mille.
Deaths do.	...	...	...	442, or 28·3 „
Vaccinated	...	...	...	152, or 9·7 „
Estimated income	...	...	...	Rs. 11,720, or 0-11-11 per head.
Do. expenditure	...	...	...	„ 10,760
Do. do. for sanitary purposes	...	...	...	„ 6,320

427. During the year the principal streets were furnished with masonry drains to the extent of 6,256 running yards; additional dust-bins were provided; a dozen latrines under construction.

428. Public health in the town fairly good during the year. Vaccination was not satisfactory in proportion to population.

Vizagapatam.

Population	...	...	...	32,191
Births registered	...	...	...	908, or 28·2 per mille.
Deaths do.	...	...	...	817, or 25·3 „
Vaccinated	...	...	...	1,296, or 40·2 „
Estimated income	...	...	...	Rs. 24,760, or 0-12-3 per head.
Do. expenditure	...	...	...	„ 24,260
Do. do. for sanitary purposes	...	...	...	„ 11,458

429. Tanks and wells were cleaned and deepened, two new wells sunk, 16,358 yards of prickly-pear removed, surface drains, 441 yards in length, constructed, reclamation of a swamp proceeded with, 3,458 square yards of the land filled up.

Public health.

430. Public health good, except that small-pox was more fatal than usual. The number of vaccinations was good.

Bimlipatam.

Population	...	...	...	8,744
Births registered	...	...	...	259, or 29·5 per mille.
Deaths do.	...	...	...	210, or 24·01 „
Vaccinated	...	...	...	350, or 40·02 „
Estimated income	...	...	...	Rs. 9,400, or 1-1-2 per head.
Do. expenditure	...	...	...	„ 9,400
Do. do. for sanitary purposes	..	...	...	„ 6,944

New works.

431. None.

Vizianagram.

Population	...	...	...	20,169
Births registered	...	...	...	462, or 22·9 per mille.
Deaths do.	...	...	...	453, or 22·4 „
Vaccinated	...	...	...	572, or 28·3 „
Estimated income	...	...	...	Rs. 12,830, or 0-10-2 per head.
Do. expenditure	...	...	...	„ 12,830
Do. do. for sanitary purposes	...	...	...	„ 7,063

432. One hundred and thirty-three yards of tunnel drains, 256 yards brick arched tunnel drains, 714 yards rough stone open drains, and one new latrine constructed. Many repairs to existing drains and latrines and wells.

New works.

Public health.

433. Dengue and small-pox prevalent. No cholera.

Palconda.

434. The Municipality in this town was abolished during the year, as owing to the want of public spirited residents to interest themselves in the subject, the municipal taxes could neither be properly raised nor expended.

Rajahmundry.

Population	...	...	...	19,738
Births registered	...	...	...	270, or 13·6 per mille.
Deaths do.	...	...	...	308, or 15·6 „
Vaccinated	...	...	...	987, or 50·005 „
Estimated income	...	...	...	Rs. 22,578, or 1-2-3 per head.
Do. expenditure	...	...	...	„ 18,216
Do. do. for sanitary purposes	...	...	...	„ 11,575

435. Eight tunnels, two brick drains, 81 dust-bins. Of 948 private latrines 750 were brought under the control of the municipal scavengers. Prickly-pear and croton plants eradicated from the station.

New works.

436. Fever and small-pox prevalent in the district. In 1872 I found small-pox prevailing in the town, and recommended a temporary increase in the vaccine staff. The result of the vaccine operations in that year, and in 1873, was that only two persons died of small-pox in 1873. The birth and death registration in this town is unreliable.

Public health.

Cocanada.

Population	...	...	...	...	17,839
Births registered	...	...	...	...	502, or 28·1 per mille.
Deaths do.	...	...	...	...	518, or 29·03 „
Vaccinated	...	...	...	...	895, or 50·1 „
Estimated income	...	...	...	...	Rs. 24,000, or 1-5-6 per head.
Do. expenditure	...	...	...	...	„ 24,000
Do. do. for sanitary purposes	...	...	...	...	„ 14,240

437. Eight new latrines provided, twenty-two wells excavated for the hot weather, contagious disease wards built in connection with the hospital. The water supply of this town is provided from the canal which is fed by the Godavery river, but as the canals are usually dry for three months in the year, local sources have to be depended upon for the hot months.

New works.

Public health.

438. Deaths from fever and small-pox were numerous, but there was no cholera during the year. Vaccination had been neglected prior to 1872.

Ellore.

Population...	...	...	...	...	25,487
Births registered	...	...	...	...	704, or 27·6 per mille.
Deaths do.	...	...	...	...	782, or 30·6 „
Vaccinated...	...	...	...	...	663, or 26·01 „
Estimated income	...	...	...	...	Rs. 16,430, or 0-10-3 per head.
Do. expenditure	...	...	...	...	„ 16,346
Do. do. for sanitary purposes	...	...	...	...	„ 9,080

New works.

439. Seven temporary latrines built. A dispensary established.

Public health.

440. Small-pox very fatal, causing 165 deaths. No cholera. Fever prevalent in the surrounding district. The vaccine operations in this town have not been sufficiently attended to.

Masulipatam.

Population	...	...	...	...	36,188
Births registered	...	...	...	...	854, or 23·5 per mille.
Deaths do.	...	...	...	...	665, or 18·3 „
Vaccinated	...	...	...	...	1,327, or 36·6 „
Estimated income	...	...	...	...	Rs. 30,800, or 0-13-7 per head.
Do. expenditure	...	...	...	...	„ 30,800
Do. do. for sanitary purposes	...	...	...	...	„ 19,610

441. Extension of the water-supply works, including the building of five new conduits and dipping reservoirs ; strengthening of the water-supply channel ; erection of a new fish market ; additions to Civil Dispensary buildings, repairs of wells, reservoirs, conduits, latrines, &c., and removal of 20,000 square yards of prickly-pear.

New works.

Public health.

442. Small-pox and fevers were rather prevalent, but there was no cholera.

Gunttoor.

Population	...	...	...	18,033
Births registered	...	...	...	350, or 19·4 per mille.
Deaths do.	...	...	...	433, or 24·01 „
Vaccinated	...	...	...	1,272, or 70·5 „
Estimated income	...	...		Rs. 32,924, or 1-13-2 per head.
Do. expenditure	...	...		„ 32,586
Do. do. for sanitary purposes	...	...		„ 22,586

New works.

443. None of any importance.

Public health.

444. Small-pox epidemic prevalent and fatal in the town.

Nellore.

Population	...	...	...	29,922
Births registered	...	...	...	650, or 21·7 per mille.
Deaths do.	...	...	...	451, or 15·07 „
Vaccinated	...	...	...	590, or 19·7 „
Estimated income	...	...		Rs. 30,250, or 1-0-2 per head.
Do. expenditure	...	...		„ 28,700
Do. do. for sanitary purposes	...	...		„ 14,926

445. An important work for the supply of the town with water from the large

Nellore tank was commenced during the year, but as it is estimated to cost from 30,000 to 35,000 Rupees, it will take some years to complete, unless money be borrowed specially for the purpose. The portion of the town within the old fort is badly in want of a water supply, all the wells being more or less impregnated with sewage matters. The works in progress are a masonry channel from the tank to the Cutcherry square, where there is a reservoir, and from which it is intended to distribute the water by pipes throughout the town.

New works.

Public health.

446. Good ; no small-pox or cholera ; fever rather prevalent.

Madras.

Population	...	...	...	397,552
Births registered in 1873	...	...		9,382, or 23·5 per mille.
Deaths registered in 1873	...	...		14,609, or 36·7 „
Vaccinated in 1873	...	...		16,083, or 40·4 „
Estimated income for 1873-74	...			Rs. 5,54,400, or 1-6-3 per head.
Do. expenditure for 1873-74	...			„ 5,61,077
Do. do. for sanitary purposes	...	...		„ 1,91,266

447. During the year some new latrines were built in addition to those already existing; 250 dust-bins were erected; some of the drains in the 2nd and 3rd divisions were flushed with water from the Trevelyan Water Works, and some of the Cariah villages remodelled.

New works.

448. Small-pox prevailed with great intensity during the year, carrying off 1,062 persons, the greater number of the victims being young children unprotected by vaccination. Fevers were not so prevalent as in 1872, and there was an entire absence of epidemic cholera; but bowelcomplaints were more fatal than usual.

Public health.

Conjeeveram.

Population	...	...	...	37,327
Births registered	...	...	...	762, or 20·4 per mille.
Deaths do.	...	...	...	835, or 22·3 „
Vaccinated	...	...	...	657, or 17·6 „
Estimated income	...	...	...	Rs. 37,490, or 1-8-4 per head.
Do. expenditure	...	...	...	„ 37,180
Do. do. for sanitary purposes	...	...	...	„ 28,950

449. The projected improvements of the water supply, as recommended by me four years ago, are still in abeyance. Nothing was done during the year, except to complete a survey of the feeding channel. There appears to have been no expenditure during the year on works of a sanitary character.

New works.

Public health.

450. Small-pox was epidemic, causing considerable loss of life. No cholera.

Cuddalore.

Population	...	...	...	40,290
Births registered	...	...	...	966, or 23·9 per mille.
Deaths do.	...	...	...	674, or 16·7 „
Vaccinated	...	...	...	724, or 17·9 „
Estimated income	...	...	...	Rs. 28,120, or 0-11-2 per head.
Do. expenditure	...	...	...	„ 27,990
Do. do. for sanitary purposes	...	...	...	„ 16,130

451. During the year some latrines have been added to those formerly built; 100 new dust-bins have been put up; surface drainage has been extended and improved; a Lying-in Hospital has been established in addition to the two Civil Dispensaries already maintained at the cost of the Municipality in this town.

New works.

Public health.

452. The health of the people has on the whole been good, and they have been free of epidemics.

Chellumbrum.

Population	...	...	...	...	15,519
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This is an important pagoda town in the South Arcot district, which late in the year was constituted a municipality. The President reports: "There has

been a powerful opposition to the introduction of the Act, and previously to its being brought into force numerous petitions praying that its provisions might not be extended to the town were presented. Since its introduction the same clique, aided, I am sorry to say, by some of the Native Commissioners, has done its best to render nugatory the endeavours of the official members to inaugurate improvements."

This quotation is enough to show that the extension of the system of municipal government to the smaller towns is no easy matter. There seems to be an impression with some persons in England, who have no practical knowledge of India or its people, that the latter are but too anxious to tax themselves to secure good water and cleanliness, but this is not my experience. I find everywhere the people ready enough to acknowledge the benefits of good water, street conservancy, lighting, medical aid to the poor, &c.; but when the question arises who is to pay for these advantages, the invariable reply is the "Circar" or "Government," and this I may state is the real feeling of intelligent and educated native gentlemen who have had experience of municipal government. They lose sight of the fact that before a Government can expend money for the benefit of local communities, it must augment its collections from the people at large. The "ignorant impatience of taxation" is so great that, otherwise sensible and reasonable, men have no hesitation in avowing their belief that the Government should do everything, and the town populations nothing for their sanitary welfare. It is this deep-rooted feeling that Government officials have to contend against in municipal administration, and which mars the successful working of municipalities where the official element is absent or but feebly represented.

Trichinopoly.

Population ...	...	...	...	76,530
Births registered ...	...	...	...	1,678, or 21·9 per mille.
Deaths do. ...	...	...	...	1,486, or 19·4 „
Vaccinated ...	...	...	...	3,846, or 50·2 „
Estimated income ...	...	...	...	Rs. 78,390, or 1-0-4 per head.
Do. expenditure ...	...	...	...	„ 78,170
Do. do. for sanitary purposes ...	...	...	...	„ 44,754

451. The chief sanitary work during the year has been the filling up of the moat around the old fort, and the construction of drains for the discharge of flood waters from the town. The Commissioners have under consideration provision for house and street drainage.

The filling up of the fort ditch has been a severe tax on municipal funds, and the work will yet take one or two years to complete.

452. Small-pox prevailed to some extent, causing 111 deaths, but otherwise the town has been fairly healthy. The vaccine operations were prosecuted with much vigour.

Sreerungum.

Population ...	...	...	...	11,271
Births registered ...	...	...	...	447, or 39·6 per mille.
Deaths do. ...	...	...	...	456, or 40·4 „
Vaccinated ...	...	...	...	287, or 25·4 „
Estimated income ...	...	...	...	Rs. 16,320, or 1·7-2 per head.
Do. expenditure ...	...	...	...	„ 16,320
Do. do. for sanitary purposes ...	...	...	...	„ 11,054

Tanjore.

Population ...	...	...	...	52,175
Births registered ...	...	...	...	1,680, or 32·1 per mille.
Deaths do. ...	...	...	...	1,592, or 30·5 „
Vaccinated ...	...	...	...	1,378, or 26·4 „
Estimated income ...	...	...	...	Rs. 56,300, or 1·1-3 per head.
Do. expenditure ...	...	...	...	„ 56,300
Do. do. for sanitary purposes ...	...	...	...	„ 32,522

453. Nine drains, 7 furlongs and 46 yards in length, constructed; main drain completed; four sets of latrines erected; two large wells excavated; minor works of repair executed; new markets are in course of erection; the water-supply was improved by deepening and widening the feeder of the Sivagunga tank.

New works.

454. This is almost the only municipal town in which numerous deaths by cholera have been reported. There are twenty fatal cases entered in the register, spread over eight months of the year.

Public health. The deaths from small-pox were not so numerous as might have been expected, considering the inefficiency of the vaccination in the town. The Commissioners report that they had ceased to pursue the system of payment by results to vaccinators, on the ground of the difficulty in checking the returns, but difficulties of this kind have not been apparent in Vellore, and other towns, where the system has been successfully worked, in combination with small money awards to the person brought up for vaccination.

Combaconum.

Population ...	...	...	...	44,444
Births registered ...	...	...	...	1,044, or 23·4 per mille.
Deaths do. ...	...	...	...	1,219, or 27·4 „
Vaccinated ...	...	...	...	1,123, or 25·2 „
Estimated income ...	...	...	...	Rs. 48,000, or 1·1-3 per head.
Do. expenditure ...	...	...	...	„ 46,710
Do. do. for sanitary purposes ...	...	...	...	„ 28,980

New works.

455. Three latrines erected. New detached wards to the Civil Hospital, for caste patients, built.

Public health.

456. Fairly good. No epidemic.

Mayaveram.

Population	...	...	...	21,165
Births registered	...	...	...	637, or 30.09 per mille.
Deaths do.	...	...	...	576, or 27.2 „
Vaccinated	...	...	...	591, or 27.9 „
Estimated income	...	...	Rs. 19,600,	or 0-14-9 per head.
Do. expenditure	...	...	„	19,600
Do. do. for sanitary purposes	...	...	„	11,480

New works.

457. Twelve tunnels at the junction of roads for drainage purposes. Temporary latrines repaired.

Public health.

Small-pox prevalent, otherwise good.

Negapatam.

Population	...	...	...	48,525
Births registered	...	...	...	1,498, or 30.8 per mille.
Deaths do.	...	...	...	1,298, or 26.7 „
Vaccinated	...	...	...	721, or 14.8 „
Estimated income	...	...	Rs. 51,660,	or 1-1-0 per head.
Do. expenditure	...	...	„	51,660
Do. do. for sanitary purposes	...	...	„	31,964

New works.

458. None reported.

Public health.

459. Small-pox prevalent. Vaccination requires to be prosecuted with greater vigour in this town.

Mannargoody.

Population	...	...	...	17,703
Births registered	...	...	...	586, or 33.1 per mille.
Deaths do.	...	...	...	511, or 28.8 „
Vaccinated	...	...	...	531, or 29.9 „
Estimated income	...	...	Rs. 20,150,	or 1-2-2 per head.
Do. expenditure	...	...	„	20,150
Do. do. for sanitary purposes	...	...	„	11,506

460. The water-supply channel to fill the tanks in this town, which had been under construction for the last three years, has been completed. An abundant supply of good fresh water has thus been secured, and all the tanks in the town have been replenished.

New works.**Public health.**

461. Small-pox prevalent; a few deaths also from sporadic cholera.

Madura.

Population	...	...	...	...	51,987
Births registered	...	...	...	...	1,516, or 29·1 per mille.
Deaths do.	...	...	...	...	1,261, or 24·2 „
Vaccinated	...	...	...	...	2,630, or 50·5 „
Estimated income	...	...	...	...	Rs. 83,835, or 1-9-9 per head.
Do. expenditure...	...	...	...	...	„ 65,325
Do. do. for sanitary purposes	...	...	...	...	„ 44,286

462. A new Civil Hospital was under construction. The Commissioners have set aside the sum of Rupees 5,000 to pay a Sanitary Engineer to draw up a scheme for the water supply and drainage of the town. These works were pointed out by me in 1870 as urgently needed.

New works.

463. The public health of the town has been fair. Only 20 deaths are recorded from small-pox. The low mortality from this epidemic, which has been rife over all the district, I attribute to the exertions of Dr. Gamack, the Civil Surgeon, aided by his brother Commissioners, in extending the practice of vaccination.

Public health.

A type of fever, known to the Tamils as "*sella kachal*," has been prevalent and fatal, but no professional description of the fever has reached me.

Dindigul.

Population	...	...	...	...	12,865
Births registered	...	..	...	...	434, or 33·7 per mille.
Deaths do.	...	...	...	...	230, or 17·8 „
Vaccinated	...	...	...	...	1,250, or 97·1 „
Estimated income	...	...	...	...	Rs. 12,920, or 1 per head.
Do. expenditure	...	...	...	...	„ 9,468
Do. do. for sanitary purposes...	...	...	...	...	„ 3,720

464. Drains have been constructed in a number of streets. Prickly-pear is being removed. The number of latrines has been increased.

New works.

A project for the supply of the town with water is hanging fire for want of funds. This town will soon have railway communication with Trichinopoly and Madura, and will probably increase in size and importance.

465. Dengue fever prevailed slightly. Vaccination has been well kept up in the town, so that the small-pox mortality was only 14.

Public health.

Tinnevelly.

Population	...	...	...	21,044
Births registered	...	...	...	693, or 32·9 per mille.
Deaths do.	...	...	...	666, or 31·6 „
Vaccinated	...	...	...	500, or 23·7 „
Estimated income	...	...	...	Rs. 20,920, or 0-15-10 per head.
Do. expenditure	...	...	...	„ 20,420
Do. do. for sanitary purposes	...	...	...	„ 10,810

468. Two new streets opened out through densely-populated parts of the town to which access was previously difficult, and where scavenging was impossible. Seven narrow streets and lanes widened to facilitate ventilation and traffic. Seven new drainage tunnels built, and many repaired. The bed of three large irrigation channels running through the town were cleaned of mud and filth. Progress was made in the masonry aqueduct for bringing water from the tank near the town to flush the drains.

New works.**Public health.**

469. Bowel-complaints were prevalent during the year, but there were not many deaths from small-pox.

Palamcottah.

Population	...	...	...	17,945
Births registered	...	...	...	678, or 37·7 per mille.
Deaths do.	...	...	...	458, or 25·5 „
Vaccinated	...	...	...	615, or 34·2 „
Estimated income	...	...	...	Rs. 21,460, or 1-3-1 per head.
Do. expenditure	...	...	...	„ 20,500
Do. do. for sanitary purposes	...	...	...	„ 12,035

470. A latrine was built and a new mortuary constructed, also sheds for dry earth for the existing latrines. Parapet walls and flooring before public wells, and drains for the escape of waste water, were constructed during the year.

New works.**Public health.**

471. The town was free of epidemic sickness. There were fourteen deaths from small-pox. Vaccination was in abeyance during the latter part of the year, through the misconduct of the municipal vaccinator who was subsequently dismissed.

Tuticorin.

Population...	...	...	...	10,565
Births registered	...	...	...	532, or 50·3 per mille.
Deaths do.	...	...	...	419, or 39·6 „
Vaccinated	...	...	...	1,512, or 143·2 „
Estimated income	...	...	...	Rs. 15,750, or 1-7-10 per head.
Do. expenditure	...	...	...	„ 15,385
Do. do. for sanitary purposes	...	...	...	„ 9,920

472. The conduit for bringing fresh water into the town was completed during the year, and this most important work will be of great benefit to the people, as the well water was nearly all bad, and brackish. Another important work is the construction of a sea wall and the reclamation of the foreshore facing the town. This work is now nearly complete. About 700 houses of the poorer people have been swept away for the site of the new railway station, and the new huts have been laid out on a better site. Tuticorin lies so low that drainage is very difficult. The railway will be of great advantage to the town, and a better style of building will probably spring up as the trade and traffic of the port increase.

473. There were eight deaths from small-pox, and dengue fever prevailed in the beginning of the year, but no other epidemic disease prevailed. Vaccination was well kept up.

Bellary.

Population	...	...	...	...	51,766
Births registered	...	...	...	...	1,016, or 19·6 per mille.
Deaths do.	...	...	...	...	718, or 13·8 „
Vaccinated	...	...	...	...	1,369, or 26·4 „
Estimated income	...	...	...	Rs. 70,598,	or 1·5·9 per head.
Do. expenditure	...	...	...	„	66,088
Do. do. for sanitary purposes	...	...	...	„	40,178

474. A new slaughter-house and one additional latrine constructed during the year. A system of house-to-house inspection of private latrines instituted. Bridges, tunnels, and drainage attended to. A new feeding channel to the large tank constructed.

The measures taken of recent years to enlarge the water supply of this town have been successful, and during the two last years there has been no scarcity.

475. The health of all classes have been fairly good during the year. Small-pox was rather prevalent in the district.

Ghooaty.

Population	...	...	...	...	6,730
Births registered	...	...	...	...	211, or 31·3 per mille.
Deaths do.	...	...	...	...	168, or 24·9 „
Vaccinated	...	...	...	...	297, or 44·1 „
Estimated income	...	...	...	Rs. 7,780,	or 1·2·5 per head.
Do. expenditure	...	...	...	„	7,496
Do. do. for sanitary purposes	...	...	...	„	3,326

New works.
Public health.

476. Four new latrines were erected,

477. Small-pox prevalent, No other epidemic.

Anantapoor.

Population	...	...	...	4,918
Births registered	...	...	...	156, or 31·7 per mille.
Deaths do.	...	...	...	90, or 18·3 „
Vaccinated	...	...	...	268, or 54·4 „
Estimated income	...	...	...	Rs. 7,120, or 1-7-1 per head.
Do. expenditure	...	...	...	„ 6,120
Do. do. for sanitary purposes	...	...	...	„ 3,410

New works.

478. None of any note during the year. The income is barely enough for the support of the ordinary establishment.

Public health.

479. No deaths from small-pox. Population healthy.

Adoni.

Population	...	...	...	22,723
Births registered	...	...	...	1,098, or 48·3 per mille.
Deaths do.	...	...	...	788, or 34·6 „
Vaccinated	...	...	...	1,708, or 75·1 „
Estimated income	...	...	...	Rs. 20,238, or 0-14-4 per head.
Do. expenditure	...	...	...	„ 18,586
Do. do. for sanitary purposes	...	...	...	„ 13,858

New works.

480. Two large masonry latrines under construction, cleaning of wells, &c.

481. In connection with the vaccination in this town, which appears to have been very successfully conducted on the results' system, it

Public health.

may be noted that only five deaths from small-pox occurred during the whole year. There was no epidemic, but deaths from malarious fevers seem to have been numerous.

Kurnool.

Population	...	...	...	25,579
Births registered	...	...	...	616, or 24·08 per mille.
Deaths do.	...	...	...	891, or 34·8 „
Vaccinated	...	...	...	344, or 13·4 „
Estimated income	...	...	...	Rs. 21,000, or 0-13-1 per head.
Do. expenditure	...	...	...	„ 21,000
Do. do. for sanitary purposes	...	...	...	„ 15,874

New works.

482. The drainage of the town has been proceeded with, and in those parts provided with drains and flushed by the water supply, the house cesspits have been closed.

The number of vaccine operations shows that the population is but inadequately protected from small-pox.

The general establishment for conservancy of the town has been maintained.

Public health.

483. Small-pox caused 10 deaths, fevers 408. Malarious fevers have been very prevalent, not only in the town, but throughout the district of Kurnool for the last two years.

Cumbum.

Population...	...	...	7,295
Births registered	...	...	286, or 39·2 per mille.
Deaths do.	...	...	292, or 40·02 „
Vaccinated...	...	...	107, or 14·6 „
Estimated income	...	...	Rs. 7,203, or 0·15-9 per head.
Do. expenditure	...	...	„ 7,161
Do. do. for sanitary purposes...	...	...	„ 2,786

484. Some work has been done in improving the drainage of the town.

New works. Cumbum is surrounded by irrigated land, and from its situation is very malarious. It is the head-quarters of the Assistant Collector, but the health of the European residents has lately been so bad, that it has been suggested to remove them elsewhere.

485. No cholera, and only three deaths from small-pox.

Public health. For the past two years intermittent fever has been most prevalent.

The Vice-President of the Municipality observes: "While I write this, there is hardly a house in Cumbum, in which some one is not suffering, or has not suffered within the last month (December and January) from fever. All the public business is impeded by repeated absence from work on account of fever." All the servants of the Vice-President (15 in number) were down with fever when he wrote, in January. The vaccine operations are insufficient.

Cuddapah.

Population	...	...	16,275
Births registered	...	...	558, or 34·2 per mille.
Deaths do.	...	...	601, or 36·9 „
Vaccinated	...	...	326, or 20·00 „
Estimated income	...	...	Rs. 31,838, or 1·15-3 per head.
Do. expenditure	...	...	„ 31,838
Do. do. for sanitary purposes	...	...	„ 21,832

486. Five new latrines and a slaughter-house were built.

New works.

The new market is still under construction.

A temporary channel in the Boogra river was kept open during the hot weather, whereby a supply of wholesome water was available for the townspeople during the dry hot months.

I have already urged upon the Commissioners the propriety of tapping this stream some three miles above the town, and bringing the water by a pipe into the centre of the town for distribution, but the execution of this work is delayed from various causes.

487. No epidemic during the year. Fever rather prevalent in the cold season.

Public health.

The vaccination department requires to be worked with more effect.

Vellore.

Population	...	...	...	38,022
Births registered	...	...	...	612, or 16·09 per mille.
Deaths do.	...	...	...	742, or 19·5 „
Vaccinated	...	...	...	1,688, or 44·3 „
Estimated income	...	...	Rs. 55,170, or 1-7-2 per head.	
Do. expenditure	...	...	„ 54,000	
Do. do. for sanitary purposes	...	...	„ 31,560	

New works. 488. Numerous drains, bridges, and tunnels; a new latrine, slaughter-house, sheds, &c.; cleaning of the supply channel of the large tank.

Public health. 489. Fever prevalent, and small-pox; great exertions made to control the latter by vaccination. The registration of births and deaths is defective.

Wallajahpett.

Population	...	...	...	12,103
Births registered...	...	...	...	424, or 35·03 per mille.
Deaths do.	...	...	...	384, or 31·7 „
Vaccinated	...	...	...	227, or 18·7 „
Estimated income	...	...	Rs. 12,340, or 1-0-3 per head.	
Do. expenditure	...	...	„ 12,340	
Do. do. for sanitary purposes	...	...	„ 6,040	

New works. 490. Tanks and wells repaired and cleaned. Three hundred and twenty-two dust boxes provided. Three new latrines designed. Stone drains built for carrying off flood waters. A new slaughter-house commenced.

This Municipality is under native management, and is very creditable to the intelligence and public spirit of the residents. The town is kept neat and clean.

Public health. 491. Very fair. Small-pox prevailed. The vaccine operations are fewer than they should be, considering the population.

Ootacamund.

Population	...	...	...	9,982
Births registered	...	...	...	434, or 43·4 per mille.
Deaths do.	...	...	...	282, or 28·2 „
Vaccinated...	...	...	...	742, or 74·3 „
Estimated income	...	...	Rs. 23,700, or 2-5-11 per head.	
Do. expenditure	...	...	„ 23,700	
Do. do. for sanitary purposes	...	...	„ 9,878	

492. The water-supply projects of this station were constructed by Government, and the distributing works have been in progress during the year. It is the intention of the municipal authorities to lay earthenware pipes wherever the water-supply channels run near public roads or places where the surface drainage falls into the channels. Earthenware pipes of fair quality are manufactured on the hills, and are now being used.

The upper portion of the lake bed is being reclaimed, and the prisoners have been at work on it for the whole of the dry season. It will take one or two years more to complete this work.

The Municipality are now manufacturing a manure from the contents of the latrines, ash-pits, slaughter-houses, &c., which is in demand by planters, and the proceeds of which are expected to yield about 3,000 rupees a-year.

There has been a marked improvement in the conservancy of the bazaars of this station of late years.

Public health. 493. Very good; a few cases of small-pox occurred, the disease being introduced from the low country.

Coonoor.

Population	...	...	...	3,058
Births registered	...	...	...	88, or 28·7 per mille.
Deaths do.	...	...	...	107, or 34·9 „
Vaccinated	...	...	...	640, or 209·2 „
Estimated income	...	...	...	Rs. 8,600, or 2-12-11 per head.
Do. expenditure	...	...	...	„ 8,228
Do. do. for sanitary objects	...	...	...	„ 3,480

494. A new survey for the improvement of the water-supply has been completed. Water is at present distributed by open channels, and those running along public roads are much defiled. A scheme is prepared for distributing clean water to the bazaar. A large number of latrines are provided, and the refuse is readily bought by the planters. The present arrangements for the storing of refuse are unsatisfactory. The station is kept fairly clean.

Public health. 495. Some cases of small-pox occurred during the year. Many of the deaths were of coolies, not inhabitants of the town, brought in from estates on the ghaut for treatment.

Salem.

Population	...	...	...	50,012
Births registered	...	...	...	1,527, or 30·5 per mille.
Deaths do.	...	...	...	1,205, or 24·09 „
Vaccinated	...	...	...	1,563, or 31·2 „
Estimated income	...	...	...	Rs. 41,900, or 0-13-4 per head.
Do. expenditure	...	...	...	„ 41,900
Do. do. for sanitary purposes	...	...	...	„ 25,220

496. The embankment of the river running through the town was proceeded with during the year, and roads opened along the banks.
New works. This is an important work, tending to the preservation of the water from fouling. It will take some years to accomplish.

Four new latrines were completed, and land purchased for the construction of others, in suitable localities.

The cart-stand was enlarged, metalled, and drained at a cost of Rupees 1,500. A new poor-house for the old and infirm was built.

Many wells were cleaned and repaired, and a staff of watchmen maintained to guard the river banks from fouling.

A Pariah settlement was removed to a more suitable locality.

497. Small-pox was prevalent and fatal, but confined almost entirely to young children. Of a total of 358 fatal cases of the disease,
Public health. 336 were of young children.

The municipal vaccination in former years must have been neglected to allow of so many unprotected persons being ready to take the disease.

The health of the town was otherwise good, and only one doubtful case of cholera was reported.

Coimbatore.

Population ...	...	...	...	35,310
Births registered ...	...	...	...	682, or 19·3 per mille.
Deaths do. ...	...	...	...	394, or 11·1 „
Vaccinated ...	...	...	...	2,451, or 69·4 „
Estimated income ...	...	...	...	Rs. 28,516, or 0-12-11 per head.
Do. expenditure ...	...	...	...	„ 26,256
Do. do. for sanitary purposes ...	...	...	...	„ 13,183

498. The drainage of the town has been improved. A
New works. new lying-in ward has been built in connection with the Civil Hospital.

The town is extending towards the Mettapolliem road, and a new suburb in that direction has been laid out. The conservancy of the town has been well maintained.

499. Small-pox appeared as a violent epidemic in the beginning of the year, but its ravages were evidently shortened by the successful
Public health. result of vaccine operations of the previous year, when about 3,000 children were successfully operated on. One hundred and four persons (mostly young children) died of small-pox. The registration of vital statistics in this town is very imperfect.

Erode.

Population	10,201
Births registered	119, or 11·6 per mille.
Deaths do.	213, or 20·8 „
Estimated income	Rs. 6,150, or 0·9·7 per head.
Do. expenditure	5,190
Do. do. for sanitary purposes	2,700

New works. 500. Two latrines were built ; two public wells constructed and another repaired.

Public health. 501. Small-pox caused 59 deaths ; efforts were made to extend vaccination. The registration of births and deaths is not very trustworthy as yet in this town.

Mangalore.

Population	29,712
Births registered	625, or 21·03 per mille.
Deaths do.	593, or 19·9 „
Vaccinated	1,242, or 41·8 „
Estimated income	Rs. 30,595, or 1·0·5 per head.
Do. expenditure	29,600
Do. do. for sanitary purposes	17,200

New works. 502. None of any importance reported. The conservancy of about 2,000 houses in the town is under municipal control, and public latrines in suitable places are maintained.

Palghaut.

Population	30,752
Births registered... ..	962, or 31·2 per mille.
Deaths do.	654, or 21·2 „
Vaccinated	3,467, or 112·7 „
Estimated income	Rs. 24,900, or 0·12·11 per head.
Do. expenditure	24,900
Do. do. for sanitary purposes	7,817

New works. An additional cart-stand was built.

Public health. 503. Dengue and small-pox prevailed. Three extra vaccinators were employed to meet the prevailing epidemic of small-pox, and, as will be seen from the large number of vaccinated, with some success. Fifty-two deaths occurred from small-pox.

Tellicherry.

Population...	...	...	20,504
Births registered	...	...	615, or 29.9 per mille.
Deaths do.	...	...	456, or 22.2 „
Vaccinated	...	...	1,104, or 53.8 „
Estimated income...	...	...	Rs. 19,750, or 0.15-4 per head.
Do. expenditure	...	...	„ 19,750
Do. do. for sanitary purposes...	...	...	„ 8,160

New works. 504. A new latrine and rest-house were built.

505. Small-pox prevailed and caused 75 deaths, chiefly amongst the fishermen and lower castes, who had been neglected in vaccination. There was very little disease otherwise.

Public health.

Cannanore.

Population	...	...	21,503
Births registered	...	...	549, or 25.5 per mille.
Deaths do.	...	...	460, or 21.4 „
Vaccinated	...	...	904, or 42.04 „
Estimated income	...	...	Rs. 25,450, or 1.2-11 per head.
Do. expenditure	...	...	„ 25,450
Do. do. for sanitary purposes	...	...	„ 9,404

During the year the operations of the municipality were extended to include the Karar limits of the cantonment, and the old town of Cannanore, but the measure has not been carried without strong opposition, and there have been no funds for the extension of sanitary works to the portions of the town but recently brought under control.

506. Roads have been made and repaired. Three latrines have been constructed and old ones improved. Dust-bins provided. Land purchased for widening of streets in the old town, and for constructing a new road.

New works.

Public health.

507. Small-pox prevalent. Enteric fever in the 43rd Regiment. No cholera.

Calicut.

Population...	...	...	47,962
Births registered	...	...	1,293, or 26.9 per mille.
Deaths do.	...	...	1,182, or 24.6 „
Vaccinated	...	...	3,874, or 80.7 „
Estimated income	...	...	Rs. 42,312, or 0.14-1 per head.
Do. expenditure	...	...	„ 42,101
Do. do. for sanitary purposes	...	...	„ 25,313

New works.

508. No new works of any importance undertaken.

Public health.

509. Small-pox prevailed severely in the beginning of the year, and the Municipal Commissioners employed eight temporary vaccinators to subdue the disease. They also granted an allowance of two annas for each child brought up for vaccination, and in this way succeeded in reaching a large number of children who could not otherwise be vaccinated. The Mapilah population are generally prejudiced against vaccination. Three hundred and thirty-seven persons died of small-pox.

Cochin.

Population...	...	...	...	13,840
Births registered	...	...	...	327, or 23·6 per mille.
Deaths do.	...	...	...	712, or 51·4 „
Vaccinated	...	...	...	2,607, or 188·3 „
Estimated income...	...	...	...	Rs. 18,770, or 1-5-8 per head.
Do. expenditure	...	...	...	„ 14,220
Do. do. for sanitary purposes	...	...	...	„ 6,130

New works.

510. Two covered drains were constructed. A new fish market built.

Public health.

511. A most violent epidemic of small-pox raged in the town, and chiefly amongst the hybrid Mussulman population, during the earlier part of the year, causing 453 deaths. The Commissioners exerted themselves to extend vaccination at this time, and procured additional temporary vaccinators from Calicut. Two thousand six hundred and seven persons were vaccinated, or nearly one-fifth of the entire population. The epidemic has now subsided. It is well known that small-pox is always more violent in the western coast districts, when the epidemic season comes, than in the eastern districts, though it is not easy to explain why it should be so.

Military Cantonments.

512. The work of sanitary improvement has not been limited to the municipal towns. The military cantonments are also sharing in the general advance. In Secunderabad the new Cavalry barracks are rapidly approaching completion, and the arrangements for the water supply of the troops at Trimulgherry are nearly completed. In a short time, moreover, the Nizam's State Railway will bring this important station in communication with the general railway system of India, to the general comfort and convenience of the military residents.

In Bangalore the Native Infantry Regiments will soon be housed in their new quarters, and a scheme for a new water supply for the town and cantonment is under consideration. In all the cantonments the conservancy of the barracks, bazaars, native lines, &c., is well cared for.

W. R. CORNISH, Surgeon-Major, F.R.C.S.,

MADRAS, 17th April 1874.

Sanitary Commissioner for Madras.

APPENDIX I.

AN INQUIRY REGARDING THE ALLEGED IMPROVEMENT
IN THE VALUE (FOR ASSURANCE PURPOSES) OF EUROPEAN LIFE
IN INDIA.

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By W. R. CORNISH, F.R.C.S., SURGEON-MAJOR, SANITARY COMMISSIONER FOR MADRAS.

1. During the past year there has been a considerable amount of controversy, and a great variety of opinion expressed, on the subject of the alleged improvement in the rates of mortality of Europeans in India. The origin of the discussion was due to the action of a young Insurance Company (The Positive) which commenced its career by the announcement that uniform (but not low) rates of premia would be charged for all parts of the world, and that no special payments would be demanded from policy-holders for the extra risks incurred by prolonged residence within the tropics. The older Insurance Companies doing business in India lost no time in denouncing the rashness of their younger brother in accepting risks on such terms, when all the available statistics of Indian mortality demonstrated that the dangers to life in India were much beyond those of temperate climates. In support of the soundness of the views of the promoters of the new Insurance Company, an appeal was made to Dr. F. Mouat, a gentleman for many years holding important official positions in Bengal, and to Lord Sandhurst, late Commander-in-Chief in India, and both of these gentlemen have given their general impressions regarding the improved value of European life in India, in favor of the system introduced by the Positive Insurance Company, but, unfortunately, have adduced no trustworthy statistical evidence in favor of the views they hold. Dr. Mouat, it is true, has referred to the statistics of railway employés in India; but these statistics are not kept in such a manner as to be thoroughly reliable for the settlement of the question in dispute.

On the other hand, Dr. Ewart, of Calcutta, on behalf of the Standard Life Office, has criticised the general statements of Lord Sandhurst and Dr. Mouat, and has adduced a good deal of statistical evidence to show that the European in India *does* incur risks to life beyond those of temperate climates, and that these risks are of a nature that should not be overlooked by any Insurance Office desirous of doing a safe and profitable business.

2. It is, I think, to be regretted that a subject of so much practical importance should have been discussed in a spirit of partizanship, and in reference to the policy of this or that Insurance Office. That there has been a great improvement in the sanitary condition of troops serving in India is sufficiently evident, when we consider that from the beginning of the century up to 1856, the mean death-rate of the European Army averaged 69 per thousand, while since 1860 it has fallen in the three Presidencies to less than 28 per thousand, and as regards the armies of Bombay and Madras to 22 per thousand. In these figures, moreover, are included the deaths of all invalids on the passage home. This improvement has been due, in a slight degree, to greater facilities of invaliding; but on the whole, no one acquainted with the subject can reasonably doubt that the troops in India are much less subjected to undue mortality than they were 30 or 40 years ago. The matter is beyond dispute, and rests on the basis of the clearest statistical evidence. But it has been argued that the statistics of the Home Army, as compared with those of the Indian Army, show that the mortality of the latter is still more than double that of the former, and that the evidence of these army statistics, so far as it goes, is against the supposition that the value of life is equal in India and England. There is, however, a fallacy in the comparison which destroys its value. It has been quite overlooked that the invaliding of the Home Army, that is, the discharge of men from the service on account of ill health, *is on a far higher scale than the discharges from the Indian Army on the same grounds*, and that the death ratios of the Home Army are kept abnormally low by sending back into civil life all those of weakly constitution, or organic disease, who in the Indian Army would to a great extent become casualties, before their removal from the country could be effected. The conditions respecting invaliding of the Home and Indian Troops being radically different, it follows that the mortality ratios of the two armies cannot be properly compared in regard to this question of the improved value of European life in India.

3. To obtain evidence on this subject, we must seek for information in the statistical history of bodies of men exposed to continuous residence in the country, like the Indian Staff Corps, the Civil and Medical Services, and it would be somewhat strange if the ameliorated conditions of existence, which have reduced the mortality of the army from 69 to 28 per thousand, had exercised no influence in regard to the class of men who contribute to the profits of Insurance Companies. There are,

however, very few statistical data of recent years which exhibit the mortality of Europeans in India of easy circumstances. The standard reports of Davis, Neison, and Brown, from which the value of European life in India is usually computed, refer to the statistics of the past—to the time when soldiers died in the ratio of 69 per thousand—rather than to the Indian risks of the present day, and bearing this fact in mind, it has seemed to me important to review the actual mortality ratios of the officials of the Civil, Military, and Medical Services for the past twelve years, and to compare the results with those obtained by eminent actuaries from earlier data.

The numbers of the classes under observation in the Madras Presidency are perhaps too few to allow of the data derived from them being made applicable to the whole of India, but this paper may be accepted as a contribution towards the solution of the very important question, whether there has been an improvement in the value of life of Europeans of the higher classes, corresponding in some degree with what we know to have taken place in the rank and file of the army.

4. Before I enter upon the statistics of the European officials of recent years, it will be proper to notice broadly the main points of divergence in the India of the period to which the actuaries' statistics refer, and the India of more recent periods and of the present day. Half a century ago it was the fashion to send out raw and ignorant boys of immature frames to recruit the ranks of Writers, Cornets, and Ensigns. They had no acquired knowledge of the best means of suiting their living to the requirements of a tropical climate, and the example of their elders was but of dubious advantage to them in guiding them into safe and steady habits. They ate and drank in quantity and quality beyond their years; they lived in houses, or more often in tents, unprotected from the extremes of temperature. The punkah was unknown, and the idea was then pretty generally entertained that a man's powers of endurance were strengthened by hardship and rough usage. If the officials of that period fell sick, as they often did, they were physicked *secundum artem*, with blue pill and drastic purges, and bled to the verge of extinction, and if their strong inherent vitality enabled them to survive the Doctor, there was no thought of aiding the restorative powers of nature by change of air and scene. In those days there were no roads, no railways, no steamers, no mountain retreats. If a man lost health in an inland station, he must stop there until death or recovery. The victim of disease had every thing against him, and nothing in his favor, while the mode of life and the utter neglect of domestic and public hygiene predisposed the Indian resident to the forms of disease specially abounding in warm climates. In contrast with this state of things we may briefly glance at the India of the present day. The climate remains unchanged; the plains of India are still hot, malarious, and inimical to the white races of mankind; but by the exercise of prudence and self-control Europeans may exist, and even enjoy good health, in them. An important consideration in the review of the circumstances of India of recent years is that the European officials arrive in the country as educated and mature men, who have been examined with reference to their *physical*, as well as to their mental, capacity for public service. They have had the advantage of acquiring the accumulated experience of those who have preceded them in an eastern career, and they find on arrival no longer a barbarous country in which their fellow countrymen have lost all home associations, and are ignorant of modern ideas of rational enjoyment, but a land in which there has been a vast improvement as regards the extension of agriculture and commerce, in which the native inhabitants are becoming sensible of the benefits of civilization, and where their fellow exiles for the most part lead lives of laborious toil.

The India of to-day is a land rapidly advancing in civilization. Its internal communications and commerce are yearly increasing; its agriculture extending; its people enjoy the blessings of peace, law, and order; and its crowded communities are being brought to see the necessity of measures for the protection of the public health. All these things have a direct and beneficial bearing on the longevity of the European officials in the country. A man who is slowly breaking down from climatic or other causes need no longer die at his post. The regulations of the Government provide for all its servants a certain amount of relaxation in the shape of privileged leave, and a sick man, wherever he may be serving, can travel without unnecessary fatigue or exhaustion to cooler regions within Indian territory, or to coast stations from which he may pass without exertion to his native land. The fashions of European countries as regards living are now very generally followed in India. Intemperance here as at home is no longer tolerated amongst decent people. The light wines of France and Germany have superseded the heady beer, and wines, and brandy of former days. The European community is better housed and better fed than of yore, although as regards the latter particular there is still room for improvement.

5. From a consideration of all these circumstances, it must be evident that the conditions of existence of Europeans, of the official classes, and of those in corresponding circumstances in India,

have undergone a long process of amelioration, and the natural conclusion must be that these changes have in the main contributed to the health and efficiency of those whose lot has been cast in the country.

6. I propose now to examine briefly the recent statistics of certain official bodies serving in India, with a view to ascertaining whether the improvement in the value of life, which all actuaries admit to have been progressive up to the dates of their investigation of the several Service Funds, has been continuous up to the present time ; and for this purpose I shall examine the recorded statistics of the Madras Civil Service, the Madras Medical Service, and the Madras Staff Corps.

I might have added to the number of lives under observation by including the statistics of officers of the British Army and the military officers of the Indian Service who have not joined the Staff Corps ; but, as regards the former body, I have thought it best not to complicate the question by their inclusion, as there are frequent changes in the *personnel* of the British Army, and their residence is not prolonged or continuous like that of the officials of the local services.

The data in regard to the few local officers who have not joined the Staff Corps I have omitted also, because it was not ready to hand, nor very material to the question at issue.

7. *CIVIL SERVICE*.—The Madras Covenanted Civil Service is composed of 157 members, and I am indebted to Mr. H. E. Stokes, the able Secretary of the Madras Civil Service Fund, for an analysis of the vital statistics of the members on active service for the period of twelve years, from 1861 to 1872 inclusive, as compared with the results for the longer period from 1848 to 1872 inclusive.

From this investigation I learn that for the extended period of a quarter of a century, from 1848 to 1872, there were 4423·0 lives at risk, and that the ratio of mortality for the whole service was 14·0 per thousand ; of withdrawals from the service 6·8 per thousand ; and of retirements, after completion of service of not less than 21 years' actual residence in India, 26·7 per thousand.

During this period the rates of mortality of the several classes of subscribers were—

Bachelors	...	...	...	...	...	10·1	per mille.
Married members	...	...	...	...	...	15·2	„
Widowers	...	...	...	...	...	33·5	„
And for the whole service	...	...	...	...	...	14·0	„

But for the last twelve years of the series there has been evidently an improvement in the value of life. For this period there were 2084·0 lives at risk, and the mortality during this period had diminished to 11·0 per mille, the withdrawals being 8·2 per mille, and the proportion living to complete their service of 21 years and upwards 30·2 per mille.

Amongst the several classes, the rates of mortality were as follow :—

Bachelors	...	...	...	...	...	5·7	per mille.
Married members	...	...	...	...	...	14·1	„
Widowers	...	...	...	...	...	27·4	„

The bachelors in both these cases represent chiefly the young members below 30 years of age, while the members from 25 years to 50 and upwards are mostly married or widowers.

8. By recent regulations the limit of Indian service (inclusive of leave) is 35 years, and it will be seen in the following abstract table that in recent years the members under observation have been between the ages of 20 and 55, while in the more extended period of 25 years there were a few members of more advanced ages. But looking to the results of the more recent period, it is shown that the mortality has decreased by 3·0 per thousand, as compared with the more extended period dating back to 1848, and that a larger proportion of members have lived to retire and enjoy their well-earned repose in their own country.

Table showing Mortality, &c., of the Madras Civil Service from 1848 to 1872.

MADRAS CIVIL SERVICE, 1848—1872 (INCLUSIVE), ACTIVE.																
Age.	Bachelors.				Married Members.				Widowers.				Whole Service.			
	Exposed to Risk.	Died.	Withdrew.	Retired.	Exposed to Risk.	Died.	Withdrew.	Retired.	Exposed to Risk.	Died.	Retired.	Withdrew.	Exposed to Risk.	Died.	Withdrew.	Retired.
19	15.5	...	...	...	...	...	...	...	...	...	...	...	15.5	...	...	...
20	560.5	0.36	0.71	...	96.5	2.07	1.04	...	1.5	...	...	...	658.5	0.61	0.76	...
25	559.0	1.43	0.72	...	384.0	1.30	...	...	12.0	...	...	...	955.0	1.86	0.42	...
30	262.5	1.14	1.91	...	411.5	1.46	1.22	...	21.5	9.30	...	...	695.5	1.58	1.44	...
35	116.5	1.72	3.43	...	531.5	0.94	0.38	...	32.5	6.15	...	...	680.5	1.22	0.88	...
40	103.5	0.97	2.90	...	508.0	2.56	...	0.20	44.5	...	4.50	...	656.0	2.13	0.46	0.21
45	53.0	1.89	...	24.53	391.0	1.53	0.26	9.47	42.0	...	9.58	...	486.0	1.44	0.21	11.11
50	13.0	...	...	30.77	176.0	1.14	0.56	15.91	19.5	5.13	30.77	...	208.5	1.44	0.43	13.23
55	0.5	...	...	200.0	55.5	...	...	32.43	3.5	...	28.57	...	59.5	...	...	33.61
60	...	...	...	...	6.0	...	...	66.67	...	...	...	...	6.0	...	...	66.67
70	...	...	...	...	...	...	...	...	2.0	50.00	...	...	2.0	50.00	...	...
75	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1684.0	1.01	1.19	1.07	2560.0	1.52	0.39	3.44	179.0	3.35	6.71	...	4423.0	1.40	0.68	3.67
1861—1872 (INCLUSIVE).																
19	2.5	...	...	...	...	...	...	...	...	...	...	...	2.5	...	...	...
20	259.5	...	0.77	...	40.0	...	2.50	...	2.0	...	...	...	301.5	...	1.00	...
25	359.5	0.83	0.56	...	194.5	1.54	...	...	7.5	...	...	...	561.5	1.07	0.86	...
30	144.0	0.69	1.39	...	186.5	0.54	1.61	...	9.5	10.53	...	...	340.0	0.88	1.47	...
35	53.0	1.89	1.89	...	201.0	1.49	1.00	...	14.0	...	...	...	268.0	1.49	1.12	...
40	43.5	...	6.89	...	231.0	1.73	...	...	18.0	...	6.66	...	289.5	1.38	1.04	0.35
45	12.5	...	...	51.85	174.5	2.29	0.58	11.46	14.0	7.14	7.14	...	202.0	2.43	0.50	13.86
50	2.5	...	...	120.00	90.0	1.11	...	23.33	11.0	...	27.27	...	103.5	0.97	...	26.08
55	...	...	...	...	15.5	...	...	45.16	...	...	...	...	15.5	...	...	45.16
60	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
65	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
70	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
75	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	878.0	0.57	1.14	11.4	1133.0	1.41	0.62	4.24	73.0	2.74	6.85	...	3084.0	1.10	0.82	3.02

I have not at hand the "causes of death" in the fatal cases of the Civil Service during the last twelve years.

9. **MEDICAL SERVICE.**—I now come to consider the rates of mortality of the members of the Madras Medical Fund from the period of 1862—78, inclusive. The circumstances of these members are peculiar, for during the period in question they have been simply a decreasing body, and have had no new members coming in at the bottom of the list to fill vacancies.

From 1860 to 1865 there were no admissions to the Indian Medical Service; but since that year the service has again been opened to young men. I have not included any of the members admitted under the new conditions, but have confined myself to the history of the members of the old Medical Fund, of whom all particulars, as to age, service, retirement, and death, are accurately recorded.

10. The subscribing members of the Medical Fund on the 1st January 1862 numbered 225, and on the 31st December 1873 they had diminished to 118. In the course of twelve years the total decrement was 107 members, or 47.5 per cent. of the strength, at the beginning of the period. There were 34 deaths and 73 retirements from the service during the twelve years.

The aggregate strength of the service for these twelve years was 2,157, and calculating the mortality on this strength, we find that the death-rate for all ages, from 20 to 60 and upwards, was only 15.7 per mille, while upwards of 33 per thousand retired to end their days at home, after various lengthened periods of service in India.

11. In the following table the mortality and retirements are shown according to age. As in the Civil Service we find a remarkably low rate of mortality (6.4 per mille) for the ages below 30. From 30 to 40 the mortality stands at 15 per mille, and curiously enough the mortality of members from 40 to 50, for the period in question, has been actually less than for the earlier decennial period, the death-rate for this period of age being only 10.5 per mille.

As regards retirements, it may be noted that only 8 out of 73 retired before they were 40 years of age, and that the great bulk of these retirements (65) occurred between 45 and 60 years of age, or after periods of service varying from 22 to 35 years in India.

Madras Medical Fund 1862—73. Table showing Mortality and Retirements at different Ages.

Ages.	Strength.	Died.	Retired.	RATIO PER CENT. OF	
				Deaths.	Retirements.
20-25	10	...	...	...	...
25-30	145	1	1	0·68	0·68
30-35	400	6	3	1·50	0·75
35-40	504	8	4	1·58	0·79
40-45	426	4	4	0·93	0·93
45-50	335	4	17	1·19	5·08
50-55	241	7	18	2·90	7·46
55-60	85	4	21	4·70	24·70
Above 60	11	...	5	...	45·45
Total ...	2,157	34	73	1·57	3·38

12. Now we have some means of comparing the mortality of the medical service in the past with the present. Mr. Samuel Brown examined this question not very long ago, and has given tables showing the mortality according to age from the commencement of the Fund in 1807 down to 1866. His results are compared with the above figures in the following table :—

Mortality according to Age, past and present periods.

	Ages.								
	20-25.	25-30.	30-35.	35-40.	40-45.	45-50.	50-55.	55-60.	Above 60.
Mr. Brown's results 1807-1866.	14·2	35·1	34·1	33·4	34·1	25·1	28·8	43·1	87·3
Actual mortality from 1862-1873	...	6·8	15·0	15·8	9·3	11·9	29·0	47·0	...

We now see that as regards this particular branch of the public service there has been a vast improvement in the value of life at nearly all ages during the period under investigation, so that the mean mortality at all ages has fallen from 33·4 to 15·7 per mille.

13. It is worthy of note that in Mr. Brown's statistics of the service for a period of nearly 60 years the mortality of the members was higher for the quinquennial period 25 to 30 than for the more advanced ages of 35 to 50, and the true explanation of the higher death-rates of young Assistant Surgeons I believe to be this ; that in the days gone by the younger men were continually on the march from station to station, living in tents, exposed to vicissitudes of climate, and existing on bad and indifferent food.

There are still remaining in the service men who for the first six or seven years of their Indian career had no settled employment, but were engaged in travelling all over the country in charge of military detachments. All this is now changed ; land marches are infrequent, and travelling is done by railway, steamer, or transit-coach, with fewer risks to life than in the period referred to.

14. In the following table is given a list of the members dying through these twelve years, with ages at the time of death, period of Indian service, and causes of death.

Amongst the 34 casualties there were three accidental or violent deaths, viz., one lost at sea, one from injuries received in falling from the roof of a house, and one from hydrophobia, the unfortunate officer being bitten by a dog sent to him for professional examination.

In this period there were only two deaths from cholera. Both occurred in the year 1865, in the Central Provinces, while marching through a tract of country in which the pestilence was rife. Had a railway been then as now in existence, it is probable that the lives of both these officers might have been spared. There was one death from fever, one from dysentery, five from heart disease or aneurism, five from apoplexy or affections of the brain and nervous system, eight from hepatic disease, three from phthisis, and three from kidney disease.

Madras Medical Fund. Roll of Deaths from 1862—1873.

Number in Effective List, 1st January 1862.	Age at Death.	Service in India.	Cause of Death.	Year of Death.
		Years.		
12	57	31·008	Heart disease	1863
20	55	30·718	Aneurism	1867
27	53	26·775	Drowned at sea	1864
31	57	28·595	Abscess of liver	1867
35	48	24·140	Heart disease	1863
36	46	22·622	Apoplexy	1862
38	52	28·392	Abscess of liver	1868
43	57	32·652	Do.	1873
50	47	21·066	Do.	1862
55	51	25·301	Do.	1866
57	53	23·849	Heart disease	1865
58	51	23·649	Cholera	1865
59	46	22·863	Heart and kidney disease	1864
65	44	20·107	Phthisis	1862
88	51	26·740	Kidney disease	1873
104	38	13·373	Dropsy	1863
105	41	16·685	Phthisis	1867
109	37	11·863	Mania	1862
119	42	16·611	Bright's disease	1869
129	32	10·674	Rheumatism	1864
135	37	7·901	Remittent fever	1862
139	37	14·403	Apoplexy	1869
145	34	11·574	Liver disease	1866
146	51	17·863	Albuminaria	1873
151	38	8·501	Abscess of liver	1864
152	32	9·195	Cholera	1865
155	40	12·093	Abscess of liver	1868
166	36	7·285	Compound fracture of thigh	1863
177	34	10·449	Phthisis	1867
193	41	13·386	Heat apoplexy	1871
194	39	10·233	Phthisis and psoas abscess	1868
206	33	9·022	Hydrophobia	1868
221	32	9·795	Dysentery	1870
224	30	5·115	Delirium tremens	1865

NOTE.—The mean age at the time of death was 43·3 years, and the average period of service in India of the dying members 17·776 years.

15. I have already alluded to the fact that the surviving members of the Medical Fund have been simply a decreasing body during the last twelve years, and it follows that the survivors are yearly increasing in age. Thus, on the 1st January 1862, the mean age of the members then in the service was 38·67 years, while on the 1st January 1874 the mean of the aggregate ages of existing members was 45·52 years, while for the whole period the mean of age of the 21·57 lives was 41·41 years. We thus see that, notwithstanding the advanced and advancing ages of the lives at risk, the annual mortality during the twelve years ending 1873 was only in the low ratio of 15·7 per thousand of strength—a most conclusive proof that the conditions of existence in India have undergone great improvement.

Mean Age of existing members.			Mean Age of existing members.			Mean Age of existing members.		
1862 ...	38·67		1867 ...	38·78		1872 ...	44·32	
1833 ...	39·36		1868 ...	41·57		1873 ...	45·01	
1864 ...	39·44		1869 ...	41·98		1874 ...	45·52	
1865 ...	40·11		1870 ...	43·00				
1866 ...	40·79		1871 ...	43·65				

16. It is alleged by Dr. Ewart that Europeans of the official classes are necessarily exposed, in the course of their duties, to the various pestilential diseases which still afflict the population of India, and that the fact of their having to serve in unwholesome climates must necessarily involve higher risk to life. There is, of course, a good deal of truth in this view of the case. High official position is no guarantee that the holders shall not succumb to epidemic disease. The members of the Medical Service, from the nature of their duties, are peculiarly exposed to the kind of influences alluded to, and yet, as a matter of fact, we notice that the mortality of this class has not been high from cholera,

dysentery, or fevers, the three forms of epidemic disease which mostly prevail in India. I shall show later on that there has been a remarkable diminution in the mortality of the official classes from these forms of disease of late.

17. The places of residence of the members of the Madras Medical Service include most of the military and civil stations within the Madras Presidency, Hyderabad, Central India—Mysore—British Burmah, the Straits Settlements, China, and the Andaman Islands. Throughout this wide range of country the Medical Officers have been exposed to the ordinary climatic risks, in addition to those which specially attach to the practice of their calling, and the result is shown in the figures now recorded.

18. *THE MADRAS STAFF CORPS.*—On the assumption of the Government of India by the Queen, in 1858, it was determined to amalgamate the British Forces of the East India Company with those of the British Army, and to reorganize the Native Army on a new system.

Consequent on these changes was formed the Indian “Staff Corps” of the three Presidencies, into which all officers of the old Indian Army had the privilege of entry on certain defined conditions. The Madras Staff Corps was formed in the latter part of the year 1861. On the 1st January 1862 352 officers of the army had joined the Staff Corps. It continued nearly stationary as regards numbers until 1867, when, in consequence of some changes as to the terms of admission, the average numbers rose to 769. On the 1st of January 1874, or the day after the date to which this report refers, the numbers stood at 693, the mean strength for the year 1873 being 701.

The strength of the Staff Corps for each year has been computed by taking the numbers living, of each rank as they stood in the Army List on the 1st January, April, July, and October of each year, and by taking the mean strength of these four periods.

By this calculation we find that the mean annual strength of the Staff Corps for the twelve years ending 1873 was 585 officers of all ranks, and that 7,021 lives were at yearly risk during this period.

19. The following table shows the mean strength and deaths of each grade for each year of the period in question :—

Mortality in Madras Staff Corps, 1862—73.

—	1862.	1863.	1864.	1865.	1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.	Total.
<i>Lieutenants.</i>													
Strength ...	85	62	46	78	70	201	166	116	67	37	41	49	1,018
Deaths ...	1	1	1	1	...	1	2	3	1	...	...	1	12
Ratio of mortality.	11·1	16·1	21·7	12·8	...	4·9	12·0	25·8	14·9	...	...	20·4	11·7
<i>Captains.</i>													
Strength ...	172	163	151	153	151	244	250	261	272	292	278	257	2,644
Deaths ...	1	...	...	2	2	3	3	8	4	5	3	7	38
Ratio of mortality.	5·8	...	...	13·0	13·2	12·2	12·0	30·6	14·7	17·1	10·7	27·2	14·3
<i>Majors.</i>													
Strength ...	100	94	103	109	119	199	200	192	195	180	155	139	1,785
Deaths ...	4	6	4	1	1	5	3	7	5	4	6	...	46
Ratio of mortality.	25·0	63·3	38·8	9·1	8·4	25·2	15·0	36·4	25·6	22·2	38·0	...	25·8
<i>Lieut.-Colonels and Colonels.</i>													
Strength ...	7	25	38	49	59	123	151	178	195	219	237	256	1,537
Deaths ...	...	...	...	...	3	4	3	4	3	3	4	6	30
Ratio of mortality.	...	...	...	...	50·8	32·5	19·8	22·4	15·3	13·6	16·8	23·4	19·5
<i>Major-Generals.</i>													
Strength ...	...	...	...	...	...	...	3	4	6	7	9	9	37
Deaths ...	...	...	...	...	...	...	...	1	...	...	...	...	1
Ratio of mortality.	...	...	...	...	...	...	...	250·0	...	...	...	...	27·03
<i>Total of all Grades.</i>													
Strength ...	364	344	338	389	399	767	767	747	729	728	711	701	7,021
Deaths ...	6	7	5	4	6	13	11	22	13	12	13	14	127
Ratio of mortality.	16·4	20·3	14·7	10·2	15·0	16·9	14·3	30·6	17·6	16·3	18·0	19·7	18·04

From this table we see that of 7,021 lives at risk, of all grades and all ages, there were 127 deaths, or a mortality ratio of 18·04 per mille.

The mortality of each grade was as follows :—

Lieutenants	11·7 per mille.	Lieut.-Colonels and Colonels.	19·5 per mille.
Captains	14·3 „	Major-Generals	27·02 „
Majors	25·8 „	All grades	18·04 „

20. India is a country in which some years are more remarkable for mortality than others, and the year 1869 was peculiar in this respect. It was a year of epidemic cholera ; but besides this, the year was a singularly unhealthy one for Europeans in India. The ratios of mortality for each year in the Staff Corps are abstracted below :—

1862	16·4 per mille.	1868	14·3 per mille.
1863	20·3 „	1869	30·6 „
1864	14·7 „	1870	17·6 „
1865	10·2 „	1871	16·8 „
1866	15·0 „	1872	18·0 „
1867	16·9 „	1873	19·7 „

21. I have not been able to ascertain the exact ages of all the officers of the Staff Corps, so that Mortality according to age. I am unable to give a very accurate table of mortality according to age in quinquennial periods ; but from the fact that promotion in the Staff Corps is regulated by periods of service in each grade, it is easy to calculate, roughly, the probable ages of the members of the various grades. Thus, for instance, the average age on admission to the service of late years has been from 19 to 20 ; and, as no one can be promoted to the rank of Captain in the Staff Corps until the completion of twelve years' service, and to the grade of Major except after eight years' service as Captain, and to Lieutenant-Colonel except after six years' service in the rank of Major, and to Colonel after twelve years' service as Lieutenant-Colonel, it follows that all Lieutenants must be from 19 to 31 or 32 years of age, Captains from 31 to 39 or 40, Majors from 39 to 45 or 46, and Lieutenant-Colonels, Colonels, and Major-Generals from 46 upwards.

When the Staff Corps was first formed, many officers who had been unfortunate in regimental promotion joined it, and many of these were beyond the ages here shown as the normal age limits for those entering the Staff Corps at an early period of their service, so that the ages of Lieutenant-Colonels, Colonels, and Major-Generals will be found to range somewhat higher than they do in the case of more recent promotions.

22. The following abstract shows the grouping of mortality calculated according to age, so far as the data will admit :—

Mortality to Age.—(Probable Ages.)

—	Ages.	Number exposed to risk.	Deaths.	Ratio of Mortality.
Lieutenants	20—32	1,018	12	11·7
Captains	32—40	2,644	38	14·3
Majors	40—46	1,785	46	25·8
Lieut.-Colonels, Colonels, and Major-Generals.	46—60 and upwards.	1,574	31	19·6

23. The following abstract shows the actual ages of the members of the Staff Corps who died in the twelve years arranged in quinquennial periods, and from this we can see that the assumed ages above are not absolutely correct, as one Captain died who was under 30 years of age, and two above the age of 45, and five Lieutenant-Colonels died who were under 45 years of age. But for all practical purposes, the data compare very favorably with those given by General Hannington and Mr. Samuel Brown :—

Mortality to Age.—(Actual Ages.)

Ages.	20 to 25.	25 to 30.	35.	40.	45.	50.	55.	60.	All Ages.
Lieutenants	...	10	1	..	...	...	...	...	11
Captains	...	1	25	10	2	...	...	...	38
Majors	...	...	23	20	3	...	...	...	46
Lieutenant-Colonels	...	...	...	5	12	2	...	...	19
Colonels and Major-Generals	...	...	...	...	1	4	3	5	13
Total	...	11	49	35	18	6	3	5	127

24. In a "Report on a scheme for granting pensions to the Widows and Orphans of the Indian Establishments," dated 1871, Mr. Samuel Brown has given a table showing the combined experience of the Bengal, Madras, and Bombay Military Funds. Some of these data are brought down to 1858, 1865, and 1869, but include also the earlier years of the present century. From this table Mr. Brown shows the mean death-rate of military men in India to have been 27·6 per thousand, while the facts now brought forward show that the experience of the past twelve years has given a death-rate of only 18·0 per thousand in this particular class of public servants.

Mr. Brown remarks further of the recent statistics of the Service Funds: "They show also the marked improvement in the rate of mortality in India in recent years, as compared with the earlier periods of the present century."

25. The "causes of mortality" in the Staff Corps I am only enabled to give partially.

The officers composing this branch of the service are scattered all over India. Some are employed in civil and military situations under other administrations, and the particulars of fatal cases of illness or death do not ordinarily reach the Madras Government. Others, moreover, who have lost their health in India, have proceeded to Europe on leave, and have died while absent from their duty. Of the total of 127 casualties, I find the places of death recorded as follows:—

Died in the Madras command	...	...	...	...	...	...	...	66
Do. other Presidencies	...	...	...	...	...	...	...	12
Do. Europe	...	...	...	...	...	...	...	30*
Do. on the homeward voyage	...	...	...	...	...	...	...	15
Lost at sea by shipwreck	...	...	...	...	...	...	...	3
Died at the Cape of Good Hope	...	...	...	...	...	...	...	1
Total ...								127

26. Of these 127 fatal cases, I have been able to ascertain the causes of death in 90 only, the medical history not being forthcoming in 37 instances.

The diseases proving fatal to life are classified as follows:—

Cholera	...	...	...	...	...	...	...	4
Fevers	...	...	...	...	...	...	...	6
Dysentery and diarrhœa	...	...	...	...	...	...	...	8
Liver diseases	...	...	...	...	...	...	...	12
Apoplexy, sunstroke, and diseases of the nervous system	...	...	...	...	...	...	...	12
Delirium tremens	...	...	...	...	...	...	...	4
Diseases of the lungs and respiratory organs	...	...	...	...	...	...	...	5
Heart disease, aneurism, &c.	...	...	...	...	...	...	...	13
Diseases of the kidneys	...	...	...	...	...	...	...	6
Venereal affections	...	...	...	...	...	...	...	1
Pyæmia	...	...	...	...	...	...	...	2
Cancer	...	...	...	...	...	...	...	2
Dropsy	...	...	...	...	...	...	...	3

Violent deaths, viz. :—

Accidental	...	...	...	...	...	...	...	8
Suicidal	...	...	...	...	...	...	...	3
Homicidal	...	...	...	...	...	...	...	1
Cause of death unascertained	...	...	...	...	...	...	...	37
Total ...								127

27. In this list of diseases it will be seen that cholera, fevers, and dysentery do not figure very largely. Liver diseases are undoubtedly high, but against these specially tropical diseases must be noted the very low proportion of mortality from diseases of the respiratory organs. Diseases of the brain and nervous system are, however, more fatal in India than in temperate climates, and diseases of the organs of circulation appear also to be high in comparison with British rates. The deaths from violent causes are also high.

* Some of these have been Colonels who have permanently settled in Europe.

28. The annual summary of the Registrar-General of England shows the following proportions of deaths in *London* from the five great classes of diseases, contrasted with the proportions in the Madras Staff Corps during the past twelve years :—

	London, 1878.	Madras Staff Corps.
Zymotic diseases	19·8	23·3
Constitutional	18·7	7·7
Local	46·1	55·5
Developmental	11·2	...
Violent causes	3·7	13·8

It must be remembered that the death classification for London includes both sexes and all ages, while those of the Staff Corps refer only to adult and aged males.

Amongst the violent deaths in the Staff Corps eight were accidental, three suicidal, and one homicidal. Of the accidental deaths, three were occasioned by shipwreck and one by drowning otherwise. Four were the result of injuries in the pursuit of field sports; two of these occurred in Europe and two in India; of the former, one was the result of a fall in hunting, the other of an accident with a gun; of the latter, one was injured by a tiger, and the other was accidentally shot by his servant carrying a spare gun.

The three suicidal cases were all gun-shot wounds, and the homicidal one was that of an officer of a native regiment shot by a sepoy.

29. With regard to the habits and mode of living of the 127 officers of the Staff Corps dying in the last twelve years, the following particulars have been ascertained :—

Temperate	70
Intemperate	29
Not ascertained	28
	127

30. I have already stated that intemperance in living is no longer a characteristic of the European community in India. Unfortunately the craving for drink is in many instances a disease inherited from intemperate progenitors, and individual instances of the excessive use of stimulants are not uncommon. But the habit is one most fatal to life if indulged in a country like India. It predisposes to fatal diseases of the brain and nervous system, to cirrhosis of the liver, to atheroma of the blood-vessels, and structural changes in the kidneys, while there is no reason to suppose that the use of alcohol exercises any protective influence as regards diseases peculiar to the country.

31. The average age at the time of death of the 70 officers of temperate habits was 42·7 years, of the 29 of recorded intemperate habits 37·4 years, and of the 28 persons whose habits were unrecorded 39·7 years, from which we may observe the degree in which intemperate habits in India tend to shorten the average duration of life.

32. Some years since I tabulated the medical histories of 684 officers of the Civil and Military Services of the Government of Madras, who had died in India in the years from 1840 to 1861, but the results still remain unpublished.

Of these, I noticed that—

340, or 49·7 per cent.,	were of temperate habits.
203, or 29·6	do. of intemperate do.
141, or 20·5	do. of habits undefined.

The causes of death in these classes were as follow :—

			Temperate.	Intemperate.	Unknown.	Total.
ZYMOTIC DISEASES.	{	Small-pox ...	10	3	1	14
		Cholera ...	67	17	34	118
		Fevers ...	80	15	28	123
		Dysentery and diarrhoea	51	25	21	97
		Syphilis .	1	...	...	1
CONSTITUTIONAL		...	10	3	1	14

LOCAL DISEASES ...	{ Brain and nerves ...	25	27	8	60
	{ Delirium tremens ...	...	66	...	66
	{ Sunstroke ...	4	5	6	15
	{ Heart diseases ...	5	3	2	10
	{ Lung diseases ...	15	5	8	28
	{ Liver do. ...	37	21	23	81
	{ Other local diseases ...	14	5	7	26
DEVELOPMENTAL DISEASES	...	...	...	...	...
VIOLENT CAUSES	...	21	8	2	31

33. In this period we find that of the total number of 684 deaths, 367, or 53·6 per cent. of the whole, were the result of diseases of the zymotic class, and we have already seen that in the later period the returns of the Staff Corps show only 23·3 per cent. of mortality from this class of diseases, so that the proportion of mortality from diseases, especially climatic, appear to have diminished by more than one half.

And as regards deaths directly resulting from the intemperate use of alcoholic drinks, we see that the proportion in the former period was 9·6 per cent. of the whole mortality, while in the later period only 4 deaths out of 127, or 3·1 per cent. of the whole, is so recorded.

34. In this distant period we see that the mortality of officials from cholera alone was 17·2 per cent. of the whole deaths, while in the later period the combined results of the Medical Service and Staff Corps show only a percentage of 4·8 from this common and fatal disease. There can be no question but that the official classes in India have been much less liable to die from cholera, fevers, and dysentery of late years. As regards the first of these, the hygienic conditions have improved; and in regard to the two latter diseases, medical treatment has advanced and materially diminished the risks to life.

35. The experience of the British Army in India, however, corroborates that of the official classes in showing that there is still much fatal disease of the liver, and that degeneration of the structure of the heart and blood-vessels is much too common amongst Europeans in India.

36. We have now seen that in the past twelve years the mortality of Indian officials of the Madras Presidency has diminished to a very marked extent. The members of the Civil Service have experienced a mortality ratio of 11·0 per thousand; the Medical Officers, consisting of a yearly decreasing body of elderly men, have died in the ratio of 15·7 per thousand, and the members of the Staff Corps in the proportion of 18·04 per thousand; and, if these ratios are compared with the standard tables of eminent actuaries who have reported on Indian mortality, it will at once be seen that the heavy premia demanded by most Insurance Offices for the acceptance of Indian risks are wholly unwarranted by the present rates of mortality of Europeans of the better classes in India.

37. The recent experience of the improvement in the value of European life in India is confirmed by the action of certain Insurance Companies doing business in the country. The "Madras Equitable,"* a mutual office of the highest character, and financially sound and satisfactory, has for many years past been reducing its premia on policies of five years' standing by 50 to 60 per cent. of the fixed rates, and the "Universal," also a highly respectable office, announces a reduction of rates equivalent to 50 per cent. on policies of a certain standing, thereby endeavouring to give to policy-holders the benefit of the changed conditions under which they now pursue their career in India.

38. It is confirmed, moreover, by the yearly increasing accumulation of elderly military officials in India, who, according to all actuarial calculations, have no business to survive to claim their "Colonel's allowances," or to live long in the enjoyment of them, but who nevertheless persist in refusing to die to confirm the predictions of actuaries who forecast the future from the experience of the past. In this remark I have no wish to underrate the value of actuary's work as regards Indian mortality, but I think that facts of recent years show they have not and do not sufficiently allow for the changed and improving conditions of existence in India, conditions which will, I trust, continue to improve until the risks to health and life of an Indian career shall cease to be reckoned of an extraordinary

* This office in the Annual Report for 1873 has adopted my suggestion, of publishing a statement showing its experience from year to year of the mortality of policy-holders. The ratio of mortality "to the total number of lives covered during any portion of the year" is stated by the Directors to be 19·72 per mille.

Of the ten deaths, seven were of policy-holders who had been paying premia for from 20 to 31 years.—
W. R. C.

kind. As it is, the brandy bottle is a greater enemy to Insurance Offices than the Indian sun, and those offices seeking to do business in India should omit no precautions to guard against the acceptance of risks that are necessarily aggravated by intemperate living. While the competition of rival offices continues so keen, there is always the probability of bad lives finding acceptance at ordinary risks, and I have no doubt that, if the Indian experience of Assurance Companies could be honestly analysed, as regards the past, we should find their excess of mortality due more to imprudent and reckless living than to climate.

W. R. CORNISH, Surgeon-Major, F.R.C.S.,
Sanitary Commissioner for Madras.

OOTACAMUND,
1st May 1874.

APPENDIX II.

REPORTS ON CHOLERA IN H. M.'S 45TH REGIMENT AND F BATTERY
20TH BRIGADE, R.A., AT THAYETMYO, BY
DRS. HUNGERFORD AND ROBERTSON.

APPENDIX II.

DETAILED REPORT OF OUTBREAK OF CHOLERA IN HEAD-QUARTER WING OF HER MAJESTY'S
34TH REGIMENT AT THAYETMYO, FROM 12TH APRIL TO 1ST AUGUST 1873.

On the 12th April 1873, the regiment up to that period having enjoyed good health from the time of its arrival in Thayetmyo in the early part of last year, a case of
12th April—1st case. cholera took place in the Head-Quarter Wing of the 45th Regiment.

The case above referred to was the wife of Private P. Maher, and the circumstances attending it, as far as I have been able to learn, are these :—The woman, who was a Roman Catholic, had been fasting on the previous day (Good Friday) ; she had gone to the bazaar to make purchases, and, among other things, had bought a piece of native pork, of which, her husband says, she did not partake ; she, however, supped heartily on raw onions and bread, and went to bed apparently in good health. The husband states that to his knowledge she had one pint of porter only ; what she may have had when at the bazaar I have been unable to find out.

She wakened her husband about 5 A.M. on the morning of the 12th April, and asked him to make some tea, and went to the latrine a couple of times between that and 6 o'clock ; at 6-30 A.M. she came to hospital, when collapse set in almost immediately accompanied with purging, vomiting, and cramps, and she died in that state about noon.

She was treated in a separate room at the female hospital, which was closed and fumigated after she died. Mrs. Maher lived in No. 9 room of No. 11 married quarters of the European Infantry lines ; the house contains fifteen quarters, and, like all the others, is built on a brick platform surrounded with a drain and raised 10 feet from the ground. The house, as well as all the other barracks, is well ventilated, and the general sanitary condition of all is good. There is no overcrowding.

The case was reported, through the Commanding Officer, to the Station Staff Officer.

The room in which Mrs. Maher was taken ill was at once closed and fumigated, and on the following day the occupants of the rooms adjoining it on each side were moved to No. 12 married quarters, distant about 250 yards, where there were several rooms unoccupied. They were placed in the centre of the building with empty rooms between them and any other families. The rooms at each side of that occupied by Mrs. Maher were also fumigated ; the latrine at once closed and disinfected ; straw bed and pillows burned. In this as well as other cases the urine tubs and latrine pans were burned and re-tarred in addition to the ordinary mode of disinfection by McDougall's powder or chloride of lime.

A minute inspection of barracks was made, and all were cautioned about the necessity of reporting sick at once in case of diarrhoea or uneasiness of any kind.

From the 12th to the 20th there were no cases of cholera, and hopes were entertained that we had simply had a sporadic case, and that the regiment might escape further
20th April—2nd case. sickness. On that day, however, Private W. Cox was admitted from No. 7 soldiers' barracks, suffering from looseness of the bowels and vomiting ; the matter passed being undigested food ; at about 10 o'clock choleraic vomiting and purging set in. I at once applied to the Station Staff Officer to have tents pitched for the treatment of cholera cases at a convenient place near the river bank ; two tents were pitched, and the patient removed to one of them as soon as possible. He had not been placed in the room with other patients, and the ward where he had been was disinfected in a most careful manner.

Other tents were pitched as necessary both for treatment of cholera cases, observation of suspected cases, and for men who had volunteered their services as orderlies.

I had hopes of Cox's recovery, as he got through the stage of collapse ; but possibly, from his having been weakened by a previous attack of dysentery, he succumbed during that of imperfect reaction.

As soon as this man was found to be suffering from cholera the end of the barrack occupied by him was cleared; the punkah fringes taken down; walls whitewashed; furniture scalded; the place in general thoroughly disinfected with Condy's fluid and sulphurous acid fumes.

On the 21st the men were paraded in their own quarters and warned by me at every bungalow not to neglect the slightest indication of illness, but to report themselves sick at once.

All the barrack rooms were emptied this morning, and the contents exposed to the sun for several hours.

On the evening of this day the daughter of the Bandmaster, aged eight years, living in a detached house containing five rooms, was attacked about 4 o'clock with purging and vomiting. She was seen by Mr. Lawrence, the Apothecary of the regiment, about 6 P.M., and at once removed to the tents, where she speedily became collapsed. Her case, however, progressed favorably, and she was discharged from hospital on the 30th April.

The room in which she had been was closed, disinfected, and fumigated, on her removal to hospital, and the clothes and bedding used were taken away, fumigated, and boiled according to instructions.

On this day I applied to the Station Staff Officer that a camp should be formed on the Brigade parade ground, and steps were taken to be in readiness to proceed to the other side of the river in case of an extension of the disease.

No cases occurred.

On the 23rd, at 6-30 A.M., the wife of Private M. Mayberry came to hospital from a room in No. 13 married barracks (she had suffered from simple diarrhoea on the previous day, and got some astringent mixture which relieved her for the time), complaining of vomiting and purging, but the stools had not then assumed a choleraic character; shortly afterwards they did so however, and violent cramps set in. She was removed to the tents, became speedily collapsed, and died at 1-30 P.M. on the 24th in that state.

The occupants of the rooms adjoining her's were removed to No. 12 married quarters, the same as those to which the families from No. 11 had been moved before; and ten days having now elapsed since the date of the case of cholera in that building, the other families were allowed to return to their own quarters, which had been in the meantime thoroughly disinfected and fumigated.

Private R. E. Cox, of the Band, No. 9 bungalow, had performed with his comrades after mess last evening, and afterwards came to hospital not feeling very well, but not suffering from diarrhoea. He was detained for the night, admitted to cholera tents early this morning as he had shown unmistakable symptoms of the disease; collapse set in about 2 P.M., and on the following day he began to amend, was transferred from cholera tents to hospital on 1st May, and discharged 8th May.

The band and drums occupying No. 9 bungalow were at once removed to the camp previously pitched on the Brigade parade ground; also the family of Private Lees, at whose house Cox had spent the early part of the evening on which he had been attacked.

Their numbers were thirty-five men, one woman, and three children. Medicine for immediate use in case of diarrhoea was entrusted to the Serjeant in charge. No further cases took place among them.

At 1 A.M., 28th April, Private Massey was brought to the tents from No. 5 bungalow in one of the Serjeants' quarters, at the angle of which he resided with his family; collapse rapidly set in, and he died at 3-30 P.M. the same day.

The occupants of this bungalow, "F" Company, viz., seventy-nine men, one woman, three children, were sent across to Tyrangoon on evening of same day.

Assistant Surgeon Carew, who had been for some time suffering from derangement of liver, with constant febrile attacks, proceeded in medical charge of the party; considering it necessary, under these circumstances, that, in case of his being laid up, further medical aid should be at hand, I wrote to the Officer Commanding the station, requesting him to telegraph for assistance.

Private J. Griffiths, residing in No. 12 room, No. 12 family quarters, brought to tent hospital from off guard at 2-30 P.M., vomiting and purging; these symptoms, together with cramps, continued during the night; collapse set in about 8-30 A.M. on the 29th, and he died during the period of imperfect re-action at 7 P.M. the same day.

This man had been detained at hospital under the effects of drink (being then a prisoner) on the

25th and 26th, returned to the guard-room on the 27th, and went on duty at 6 A.M. on the day of attack.

8th case. Private S. Dwyer was on duty with the fire-engine in the town of Thayetmyo; on the way back was attacked with vomiting and purging, was taken to the tent hospital at 2-15 P.M., and died in collapse at 11-30 P.M. same night.

He resided in No. 7 bungalow, and the occupants of this bungalow (the same as that from which Private Cox was admitted on the 20th instant) were ordered to cross the river on the morning of the 29th, as well as those from No. 12 family quarters.

9th case. Private Kennedy from No. 5 bungalow was attacked as "F" Company was starting to cross the river this evening at 5 P.M. On arrival at hospital was detained in observation tent till undoubted choleraic symptoms appeared, when he was removed to cholera hospital. He recovered and was discharged on the 12th May.

29th April. This morning the families already mentioned, as well as the whole of H Company, crossed Tyrangoon, viz., seventy-seven men, five women, and six children.

10th and 11th cases. Privates Hunter and Ward attacked with cholera in rooms Nos. 8 and 13 of No. 10 family quarters; their families were removed to tents pitched on open piece of ground between the guard-room and the fort, with conservancy tent for their special use, and the remaining families in the bungalow, twelve in number, were ordered to cross the river this evening, viz., twelve men, twelve women, twenty-one children.

Private Hunter died on the evening of admission at 5-45 P.M. in the state of collapse, and Private Ward recovered slowly, having had severe secondary fever, followed by a pustular eruption on upper and lower extremities.

12th case. Lance Serjeant E. Gould, E Company, occupying a separate room in No. 8 bungalow, came to hospital complaining of looseness in the bowels at 8-30 P.M.; was kept in one of the tents set apart for observation of suspected cases; was moved to cholera tent the same night; partial collapse having taken place, but the progress of the disease being arrested at this stage, he made a rapid convalescence, and was discharged on 7th May.

13th case. In the first detachment at Tyrangoon on the 23th April, almost immediately on landing, Private Pry, of letter F Company, who had only been discharged from hospital that morning, where he had been treated for colic, was attacked with symptoms of cholera. The disease in his case did not assume a severe type, and he became speedily convalescent, and was discharged on 8th May.

12th May--14th case. When I was beginning to hope that the epidemic was at an end, the child of Private Lynch, aged 6 years, was attacked on the evening of the 12th May, between 6 and 7 P.M., in No. 13 married quarters. He was taken to the tents about 8 P.M., being then in first stage of collapse; re-action set in about 12-40 A.M., cerebral symptoms soon followed, and he died comatose at 7-30 o'clock on the following morning.

As soon as I saw him I recommended to the Commanding Officer that the barrack in which he resided should be vacated as soon as possible, and by 7 A.M. on the 13th May the whole of the occupants had proceeded to cross the river to Tyrangoon, instructions being given that they were to be kept as far as possible isolated from those who had previously gone over. The numbers who crossed on this occasion were eleven men, eleven women, and nineteen children, making the entire strength 179 men, twenty-nine women, and forty-nine children.

31st May--Tyrangoon. All suffered some inconvenience from occasional showers, but enjoyed good health; and on the morning of the 31st May, the monsoons having set in, and 17 days having elapsed since the last detachment had been sent over, I wrote to the Officer Commanding representing that they might be permitted to return to Thayetmyo. Before my recommendation had been forwarded, however, a report was sent in from the 15th case. medical officer in charge that Serjeant C. Stevens, who was acting Canteen Serjeant and living in the canteen (which was at once transferred to another building), had been attacked with cholera on the previous evening, and had died at 5-30 A.M. on that day. This unfortunate occurrence, of course, put a stop to the move to the discomfort of all, especially the married people, who were now beginning to suffer much discomfort from the heavy rain which beat through the roof and walls in many places, notwithstanding that the Engineer's department have had workmen constantly employed repairing them.

On my visiting the detachment this day, May 31st, I found that a large pool of water had formed in the low paddy ground, midway between the river and the barracks, draining the rising grounds around which was used as a latrine by the natives of the village; an offensive smell arose from it, and I on the following day addressed a letter on the subject to the Station Staff Officer, requesting him to bring the matter to the notice of the Deputy Commissioner.

On the 1st June another case occurred at Tyrangoon; the daughter, aged 2½ years, of Color Serjeant Mason, living with a family of four persons in a bungalow containing twelve rooms, was attacked with cholera and died the same night. The rooms contain each about 2,900 cubic feet, and are each occupied by a single family. A verandah, 9½ feet wide, runs along the south side of the building; the rooms are ventilated by doors at the north and, south sides, and being composed of matting only with bamboo floors, there is always an abundant supply of air. The child died eight hours after attack. The quarter and the next one to it were closed and fumigated, and the families removed to an empty bungalow.

On the 6th June Private Farrell was attacked about 3 P.M., having suffered from diarrhoea since the previous day; he became collapsed about 8 P.M. on the evening of the 6th, and continued in that state till the following afternoon, when reaction set in. He was discharged from hospital on the 17th June. The men occupying the bungalow from which Farrell was brought to hospital were placed in tents pitched on a neighbouring hill.

No further cases having appeared, and the men being uncomfortable from the leaking of the huts, besides that they were drinking to excess, I represented on the 17th June to the Officers Commanding the station and regiment that the men might now be brought to Thayetmyo; this was carried into effect on the morning of the 19th; one man suffering from bubo and one woman from general debility were the only cases under hospital treatment at the time.

Eighteen days after the return of the detachment from Tyrangoon and one month after the occurrence of the last case of cholera in the regiment on the 7th July, a prisoner from the cells, Private Titus Roome, was admitted to hospital about 10 A.M., stating that he had been purged since 6 A.M. that day; almost immediately after admission he began to vomit, and purging of a dark bilious character continued; about noon he had a small serous motion, and at once became collapsed; the case terminated fatally on the 9th, 57 hours after the first signs of diarrhoea and 51 hours after collapse set in. It is difficult to account for the occurrence of this case: he had been a prisoner since coming from Tyrangoon on the 19th ultimo, was detained at the hospital for a day or two on first arrival, being unfit to go before the Commanding Officer from the effects of excess in drink. He was confined in the guard-room till the 2nd July, when he was transferred to the cells by sentence of court-martial. The cells are very clean and well ventilated buildings, and there were at the time two other prisoners, neither of whom have suffered from any suspicious symptoms.

Cholera had been prevalent in the lines of the Royal Artillery from the 19th June, but there had been no communication between them and the cell prisoners of the 45th.

On this date two cases occurred: one Private Sands in No. 6 barrack, where none had hitherto been reported, and one a child named Colton in No. 10 family quarters; both these cases proved fatal; the men from No. 6 barrack were placed under canvas on the Brigade parade ground the same afternoon. No further cases took place among them, and they returned into barracks on the 4th August.

On the 24th and 25th one case occurred each day, the first being a child named Keats from No. 4 barrack, and the second a young woman, aged 16, named Lees, from No. 10 family barrack; both these cases were of a milder type, and both recovered. The next and last case, a child named Minall, was attacked in the building used as a female hospital, where his mother resides as matron; he also recovered. This was the only instance in which any of the attendants on the sick seem to have been instrumental in causing the extension of the disease, and in no single instance have they contracted it themselves. The families in which these cases took place were isolated as far as possible, and all their quarters vacated, white-washed, and fumigated.

The treatment in the first case was exclusively calomel in small doses frequently repeated, strong beef tea, chicken broth, and soda-water; in subsequent cases the saline mode of treatment recommended by Dr. Stevens was carried out, with the addition, in a few cases, of hydrochlorate of ammonia. Aromatic spirits and the carbonate of

ammonia were used when stimulants were necessary. Sinapisms, frictions, cupping, and turpentine fomentations to loins were freely used. Beef tea well salted, chicken broth *ad libitum*, and soda-water—champagne was used in a case of secondary fever, when it was given with good effect in conjunction with sulphate of quinine, and in one other case during the stage of collapse.

In the cases of children treated at the termination of the epidemic small doses of calomel were again had recourse to.

The occupants of the rooms in which cases occurred were from the first removed, and at once isolated as far as possible; in family quarters the occupants of the adjoining rooms were also at first removed from their quarters; these were in all cases carefully cleansed, disinfected, and fumigated with sulphurous acid. Latrines were closed, thoroughly cleansed, disinfected, and the vessels burned and re-tarred.

Two men were told off from the 20th April to accompany the conservancy carts from the tents to the place set apart for the purpose in the jungle, to see that purification of the vessels in which excreta were removed was thoroughly carried out. Clothes and bedding used by patients in hospital, or brought with them from barracks, were at once fumigated and boiled before leaving the hospital, a boiler being kept on the fire all day for this purpose.

Employment of soldier orderlies was necessary on account of the difficulty of procuring natives; they were provided with separate tents, and were not again allowed to rejoin their Companies till all danger of carrying the disease had passed away. None of them suffered from choleraic symptoms; this may be attributed to their own attention to orders given as to strict cleanliness and use of disinfectants. Coffee was always issued to them on coming on and off duty. The native hospital servants also entirely escaped the disease.

With regard to the origin and cause of the outbreak, there is great uncertainty; one case of cholera only is positively known to have been brought to Thayetmyo from Prome prior to Mrs. Maher being attacked on the 12th April. Another, a prisoner from the jail at Prome, was admitted to hospital on that date, and did not reach Thayetmyo till after Mrs. Maher's death.

The first case above referred to was brought from Prome on the 15th March and treated in a shed by the river side and recovered. Other cases, in all fifteen, have been reported to the Deputy Commissioner as deaths from cholera in the district—some of them close to Thayetmyo, others twenty miles distant; but I am informed by him that whether they were really cholera or not is doubtful.

A report got abroad on the 22nd March that a case of cholera had taken place in Thayetmyo, and an order was issued by the Officer Commanding to hinder soldiers and their families from visiting the town; after an interval of a week, however, no disease being heard of, this order was no longer enforced.

Beyond the cases referred to in the previous paragraph, I have only been able to ascertain that one case occurred in the vicinity, viz., on the 24th April, when a milkman, residing about two miles from cantonment to the south of Thayetmyo, was said to have been attacked and died on the following day. There had been no cases among the camp followers of the different corps and departments, nor had there been any cases among the men of the 1st Native Infantry Regiment. Two cases of diarrhoea with vomiting, in one of which the excreta were of a serious character, occurred in that corps on the 5th April, giving rise to suspicions at the time; both recovered without distinct choleraic symptoms.

During the remainder of the time embraced by the first outbreak of the epidemic in the 45th Regiment at Thayetmyo, I did not hear of any cases of cholera among the natives. Cases were, however, said to occur at the opposite side of the river, and on the 30th May a Serjeant of the 45th Regiment was attacked at Tyrangoon, and two other cases took place between that date and the 6th June in the same place.

On the 19th June, the same day that the detachment of 45th Regiment returned to Thayetmyo, cholera appeared among the grass-cutters belonging to the Royal Artillery; from there it extended on the 24th to the men of the battery, and on the 7th July again attacked the 45th, making its first appearance in the regimental cells. In this case there was no direct intercourse between the man attacked and the artillery lines, as he had been a prisoner from the date of his return from Tyrangoon, viz., 19th June, and there had been no cases at that place since the 6th June, one month prior to his attack. On this occasion the epidemic was more extended in range than on its first outbreak, and both the inmates of the jail and inhabitants of Thayetmyo and vicinity suffered severely. One case took place in the 1st Madras Native Infantry Regiment.

Two Europeans under charge of Civil Surgeon were attacked, one an officer in the Public Works Department, the other a Serjeant in the Ordnance Department.

The total number of cases reported among natives during this second outbreak in Thayetmyo and vicinity, excluding camp followers of the Royal Artillery, was 158, of whom 31 admitted from the jail and 18 from the town of Thayetmyo were treated in a temporary hospital at a convenient distance from the town.

The dirty condition of the town of Thayetmyo, as well as of the villages outside cantonments, must always be a source of possible contamination, no matter how good may be the sanitary arrangements within cantonments; there is a nullah also to the north of cantonments which, in the dry season, is used as a latrine by the inhabitants of the villages on its banks, one of these being occupied by the horse-keepers of the Royal Artillery; this nullah being partially outside cantonments, it is impossible to prevent the nuisance complained of. Perfect isolation seems to be an absolute impossibility, though, of course, it is advisable to carry it out as well as may be.

Jungle, although kept under by cutting at certain seasons, is much too luxuriant on parts of the cantonment lands, and it will be advisable that part of them be leased for dry cultivation; this measure would have been carried out this year, but that the grazing had been let before any applicants for cultivating land came forward.

The number of tents kept in store in Thayetmyo, though sufficient during the recent epidemic, would not have been so had it been necessary to put the majority of the garrison under canvas at the same time; this may occur any season, as the cholera seems to be getting a regular visitant here, and the stock of tents should be increased.

The advantage in moving troops in seasons of cholera was evident on the present occasion by the stoppage of the disease in every instance, when the men were moved either on to the parade ground or to the other side of the river. Of course I consider that in the case of Private Pry attacked on the passage to Tyrangoon, the disease was contracted before leaving Thayetmyo.

The subsequent short epidemic at Tyrangoon did not occur for seventeen days after the last detachment were sent over, so it is probable the germs of the disease were absorbed after arrival.

With regard to the cholera station at Tyrangoon, its sanitary state is indifferent, although the site is apparently an eligible one. The huts are built on a number of small hills, and in wet weather communication between them becomes almost impossible, the gullies being soon filled with water; paths from one hill to another with foot-bridges are indispensable in case the camp is occupied during the rains.

The water-supply is procured from the Irrawaddy, below the town of Allan-myoo, and is contaminated by the filth of that town. The hills on which the huts are built increase the difficulties in supplying water, and extra water carriage should in consequence be provided.

During the recent epidemic the river water for drinking and cooking was always purified with alum and filtered before use.

Latrines are indifferent.

Huts should be kept in repair and ready for occupation at all times; they were not so when the troops were sent out on the present occasion, and though workmen were engaged on them continually till the rains began, they were not even then water-tight; this caused a great deal of unnecessary discomfort.

Between the foot of the hills on which the huts are built and the river is a piece of low paddy land, interspersed with patches of jungle; this is used as a latrine by the natives, and at the commencement of the rains give rise to a very offensive smell. It seems advisable, if Tyrangoon is kept up as a sanitary station, that the ground occupied by the military buildings, and all between that and the river should be placed under cantonment regulations, and altogether made over to the military authorities.

Camping ground at Meaday, this has been allowed to become perfectly useless as a station for encamping troops; the ground has in parts been ploughed for cultivation, and in other parts allowed to lapse into jungle; it will be well if it were properly laid out and drained, and the weeds and young jungle cleared away annually, or oftener if necessary.

It will be seen from perusal of the foregoing report, as well as from the returns and plan sent with it, that the recent epidemic of cholera was not restricted to any particular part of the station, and that it was not communicated from building to building, but pursued an erratic course invading in the lines of the 45th Regiment no less than

Concluding remarks.

thirteen buildings out of a total of eighteen occupied by that corps, and presenting in eight of these buildings only one case each.

The accompanying returns and plan will show all particulars regarding the epidemic in a tabular form.

In conclusion, I have to express my thanks to Dr. Robertson, Royal Artillery, for assistance rendered during the early part of the epidemic, when it was confined to the 45th Regiment, and for placing at my command the services of his Hospital Assistant Vencatachallum Moodeliar, who made himself very useful.

Mr. C. St. J. Lawrence, Apothecary, 45th Regiment, was indefatigable in his attendance at all times, and I have much pleasure in bearing testimony as to the value of his services.

I have also every reason to be satisfied with the mode in which his duties were performed by Assistant Apothecary H. Roberts, of whom, when on duty at Tyrangoon, Assistant Surgeon Carew spoke in the highest terms.

THAYETMYO,
15th September 1873.

(Signed) R. HUNGERFORD, Surgeon-Major,
H. M.'s 45th Regt., S.F.

The following returns accompany this report:—

- Register of Sub-soil Water.
- Progress Report of Cholera.
- Effect of upper stories on proportion of Attack.
- Table showing Percentage of Attacks and Deaths.
- Daily Nominal Register.
- Meteorological Observations.
- Plan of the Barracks.
- Table showing the buildings in which Cholera occurred, &c.

*Register showing the Distance of Sub-soil Water, fall of Rain, Number of Cases of Cholera, &c., at
Thayetmyo during the month of April 1873.*

Date.		Distance Level of Sub-soil Water from Surface of Ground.		Fall of Rain.		Number of Cases of Cholera reported.			
Month.	Day.	Feet.	Inches.	Inches.	Cents.	European.	Native Troops.	Cantonment Bazaar.	Jail and Civil Population.
April 1873.	1	...	...	...	...	...	...	...	...
	2	55	4½	...	...	...	...	...	...
	3	...	...	...	...	...	...	...	...
	4	55	7½	...	...	...	...	...	...
	5	...	...	...	...	...	...	...	...
	6	55	10	...	...	...	...	...	...
	7	...	...	...	...	...	...	...	...
	8	56	...	...	...	...	...	...	...
	9	...	...	...	...	...	...	...	...
	10	56	1	...	...	...	...	...	...
	11	...	...	...	...	...	...	...	...
	12	56	8½	...	...	1	...	...	...
	13	...	...	...	...	...	...	...	1
	14	56	6	...	...	...	...	...	...
	15	...	...	...	...	...	...	...	...
	16	56	8	...	...	...	...	...	...
	17	...	...	...	...	...	...	...	...
	18	56	10	...	...	...	...	...	...
	19	...	...	...	...	...	...	...	...
	20	56	10½	...	2	1	...	...	...
	21	...	...	...	...	1	...	...	...
	22	56	11	...	...	...	...	...	...
	23	...	...	...	...	2	...	...	...
	24	57	1½	...	...	...	...	...	...
	25	...	...	...	...	...	...	...	...
	26	57	3	...	...	...	...	...	...
	27	...	...	...	...	...	...	...	...
	28	57	5	...	18	4	...	...	...
	29	...	...	...	...	4	...	...	...
	30	57	7	...	...	...	...	...	...

True copy of return received from Civil Surgeon for months from April to August 1873.

THAYETMYO,
15th September 1873.

(Signed) R. HUNGERFORD, Surgeon-Major,
H. M.'s 45th Regt. S.F.

Register showing the Distance of Sub-soil Water, Fall of Rain, Number of Cases of Cholera, &c., at
Thayetmyo during the month of May 1878.

Date.		Distance Level of Sub-soil Water from Surface of Ground.		Fall of Rain.		Number of Cases of Cholera reported.			
Month.	Day.	Feet.	Inches.	Inches.	Cents.	European.	Native Troops.	Cantonment Bazaar.	Jail and Civil Population.
May 1878.	1	...	...	...	72	...	...	...	...
	2	57	11	...	...	...	...	...	...
	3	...	...	...	...	...	...	...	...
	4	57	8	...	...	...	...	...	...
	5	...	...	...	...	...	...	...	...
	6	57	7	...	...	...	...	...	...
	7	...	...	...	...	...	...	...	...
	8	57	8	...	...	...	...	...	...
	9	...	...	...	...	...	...	...	...
	10	57	8½	...	...	...	...	...	...
	11	...	...	...	...	...	...	...	...
	12	58	...	...	...	1	...	...	...
	13	...	...	...	18	...	...	...	...
	14	58	3	...	...	...	...	...	...
	15	...	...	...	...	...	...	...	...
	16	58	5	...	...	...	...	...	...
	17	...	...	...	...	...	...	...	...
	18	...	...	...	...	...	...	...	...
	19	...	...	...	...	...	...	...	...
	20	...	...	...	...	...	...	...	...
	21	...	...	...	...	...	...	...	...
	22	...	...	...	...	...	...	...	...
	23	...	...	...	...	...	...	...	...
	24	...	...	...	...	...	...	...	...
	25	...	...	...	...	...	...	...	...
	26	...	...	...	...	...	...	...	...
	27	...	...	...	...	...	...	...	...
	28	...	...	...	...	...	...	...	...
	29	...	...	...	...	...	...	...	...
	30	...	...	2	20	...	...	...	...
	31	...	...	2	6	1	...	...	...

Register showing the Distance of Sub-soil Water, Fall of Rain, Number of Cases of Cholera, &c., at
Thayetmyo during the month of June 1878.

Date.		Distance Level of Sub-soil Water from Surface of Ground.		Fall of Rain.		Number of Cases of Cholera reported.			
Month.	Day.	Feet.	Inches.	Inches.	Cents.	European.	Native Troops.	Cantonment Bazaars.	Jail and Civil Population.
June 1878.	1	...	...	1	11	1	...	...	...
	2	...	...	...	14	...	...	...	...
	3	...	...	...	...	...	...	...	...
	4	...	...	...	22	...	...	...	...
	5	...	...	...	10	...	...	...	...
	6	...	...	...	...	1	...	...	...
	7	...	...	...	...	...	...	...	...
	8	...	...	...	...	...	...	...	...
	9	...	...	...	...	...	...	...	...
	10	...	...	...	...	...	...	...	...
	11	...	...	...	30	...	...	...	...
	12	...	...	...	70	...	...	...	...
	13	...	...	1	84	...	...	...	...
	14	...	...	...	...	...	...	...	...
	15	55	...	1	8	...	...	...	...
	16	...	...	...	...	...	...	...	...
	17	54	8	...	5	...	...	...	...
	18	...	...	...	10	...	...	...	...
	19	54	10	1	8	...	...	2	...
	20	...	...	...	19	...	...	...	...
	21	55	2	...	34	...	...	...	...
	22	...	...	...	...	...	...	...	...
	23	54	8	...	3	...	...	...	...
	24	...	...	...	20	1	...	2	...
	25	54	6	...	24	1	...	1	...
	26	...	...	...	5	...	...	...	...
	27	54	4½	...	...	1	...	...	...
	28	...	...	...	14	...	...	...	1
	29	54	3	...	1	...	...	...	1
	30	...	...	...	16	...	...	...	...

Register showing the Distance of Sub-soil Water, Fall of Rain, Number of Cases of Cholera, &c., at Thayetmyo during the month of July 1873.

Date.		Distance Level of Sub-soil Water from Surface of Ground.		Fall of Rain.		Number of Cases of Cholera reported.			
Month.	Day.	Feet.	Inches.	Inches.	Cents.	Euro; can.	Native Troops.	Cantonment Bazaars.	Jail and Civil Population.
July 1873.	1	54	1 $\frac{1}{2}$	...	...	...	...	...	...
	2	...	...	...	10	...	...	...	4
	3	54	2	...	49	...	...	...	2
	4	...	...	...	...	...	...	...	4
	5	54	2	...	...	...	...	1	...
	6	...	...	...	...	...	...	2	2
	7	54	4	...	...	1	...	...	3
	8	...	...	...	21	3	...	...	1
	9	54	6	...	28	...	...	6	2
	10	...	...	...	...	...	...	3	3
	11	54	5	...	4	1	...	1	...
	12	...	...	...	...	...	...	...	1
	13	54	7	...	54	...	...	...	2
	14	...	...	...	5	...	...	1	...
	15	54	7	...	...	...	...	1	2
	16	...	...	...	18	...	...	...	...
	17	54	5 $\frac{1}{2}$	...	54	...	...	2	...
	18	...	...	...	...	1	...	...	1
	19	54	5 $\frac{1}{2}$	...	36	...	1	1	...
	20	...	...	...	5	...	...	...	1
	21	54	6	...	52	...	...	...	2
	22	...	...	...	14	1	...	...	2
	23	54	6	...	50	1	...	...	...
	24	...	...	...	14	1	...	...	1
	25	...	...	...	90	2	...	...	...
	26	...	...	1	24	...	...	...	...
	27	...	...	...	6	...	...	...	...
	28	...	...	1	16	...	...	...	...
	29	...	...	1	4	...	...	...	1
	30	...	...	...	5	...	...	...	1
	31	...	...	...	10	...	...	...	...

Register showing the Distance of Sub-soil Water, Fall of Rain, Number of Cases of Cholera, &c., at Thayetmyo during the month of August 1873.

Date.		Distance Level of Sub-soil Water from Surface of Ground.		Fall of Rain.		Number of Cases of Cholera reported.			
Month.	Day.	Feet.	Inches.	Inches.	Cents.	European.	Native Troops.	Cantonment Bazaars.	Jail and Civil Population.
August 1873.	1	54	7	...	10	1	...	...	1
	2	...	...	...	38	...	...	...	...
	3	54	7	1	10	...	...	...	...
	4	...	...	...	10	...	...	...	...
	5	54	4 $\frac{1}{2}$	1	9	...	...	...	...
	6	...	...	...	5	...	...	...	...
	7	54	4 $\frac{1}{2}$	...	62	...	...	...	...
	8	...	...	...	12	...	...	...	...
	9	54	3	...	...	...	...	...	...
	10	...	...	...	62	...	...	...	...
	11	54	3	...	...	...	...	...	...
	12	...	...	...	...	...	...	...	...
	13	54	3	...	...	...	...	...	...
	14	...	...	...	14	...	...	...	...
	15	54	4	...	...	...	...	...	...
	16	...	...	...	14	...	...	...	...
	17	54	7	...	...	...	...	...	...
	18	...	...	...	...	...	...	...	...
	19	54	7	...	...	...	...	...	...
	20	...	...	...	13	...	...	...	...
	21	54	8	...	5	...	...	...	...
	22	...	...	...	...	...	...	...	...
	23	54	8 $\frac{1}{2}$	...	...	...	...	...	...
	24	...	...	...	...	...	...	...	1
	25	54	8	...	...	...	...	...	1
	26	...	...	...	5	...	...	...	1
	27	54	7	...	36	...	...	...	...
	28	...	...	...	10	...	...	...	...
	29	54	6 $\frac{1}{2}$	...	5	...	...	...	2
	30	...	...	...	...	...	...	...	1
	31	54	6	...	40	...	...	...	2

True copy of return received from Civil Surgeon for the months from April to August 1873.

THAYETMYO,
15th September 1873.

(Signed) R. HUNGERFORD, Surgeon-Major,

H. M.'s 45th Regt. S.F.

Progress Report of Cholera at Thayetmyo in Her Majesty's 45th Regiment "Sherwood Foresters," submitted in accordance with No. 61 of the Revised Rules regarding means to be adopted on outbreak of Cholera.

Station.	Number or Name of Building.	Number and Detail of Occupants.	Date of First Case.	Date of Evacuation of Building.	Number of Cases before Evacuation.	Number of Cases among those Occupants after Evacuation.	Date of Re-occupation.	Remarks.
Thayetmyo. Her Majesty's 45th Regiment "Sherwood Foresters."	No. 2 barracks, female ward...	6	1873. 1st Aug.	1873. 2nd Aug.	1	None.	1873. 12th Aug.	One case took place en route to Tyrangoon, evidently contracted before evacuation. Two cases contracted at Tyrangoon.
	" 4 do. library ...	4	24th July.	25th July.	1	"	6th "	
	" 5 F Company ...	81	28th April.	28th April.	2	3	19th June.	
	" 6 G do. ...	85	23rd July.	23rd July.	1	None.	3rd Aug.	
	" 7 H do. ...	81	20th April.	29th April.	2	"	19th June.	This case took place in one of the Sergeants' rooms. The room was closed, but the remainder of the building was not evacuated.
	" 8 E do. ...	81	30th "	"	1	"	10th May.	
	" 9 Band-room ...	45	24th "	24th April.	1	"	10th "	
	" 10 Family-quarters ...	53	29th "	29th "	4	"	19th June.	
	" 11 do. ...	47	12th "	"	1	"	"	Only the room in which the case occurred and one on each side of it were closed and fumigated. The entire building was not evacuated. A case after evacuation took place at Tyrangoon.
	" 18 do. ...	53	23rd "	13th May.	2	1	19th "	
	Cells ...	2	7th July.	"	1	None.	"	
	Guard-room ...	15	28th April.	"	1	"	"	
	Band Master's quarters ...	5	20th "	"	1	"	"	The room in which the case occurred was closed and fumigated; the building was not evacuated.

THAYETMYO, (Signed) R. HUNGERFORD, Surgeon-Major,
15th September 1873. H. M.'s 45th Regt. "Sherwood Foresters."

Effect of Upper-stories on Proportion of Attacks.

Date.	Number occupying Upper-stories on that date.			Number of Attacks in Upper-stories on that day.			Number occupying Lower-stories on that date.		Number of Attacks in Lower-stories on that date.		Remarks.
	M.	W.	C.	M.	W.	C.	Gr.	Other	Gr.	Other	
12th April 1873 ...	422	66	117	...	1	...	Guard 15	Guards. 17	Guard. ...	Guards. ...	* One attacked en route to Tyrangoon.
20th do. ...	422	65	117	1	...	...	15	17	...	...	
21st do. ...	421	64	117	...	...	1	15	17	...	...	
23rd do. ...	420	64	117	1	1	...	16	17	...	...	
28th do. ...	419	64	117	4	*	...	16	17	1	...	
29th do. ...	418	64	117	3	...	...	16	17	...	...	
12th May 1873 ...	417	64	117	...	...	1	17	17	...	...	
31st do. ...	413	64	118	...	...	...	17	17	1	...	
1st June 1873 ...	413	62	120	...	...	1	17	17	...	...	
6th do. ...	411	61	119	1	...	...	18	17	...	...	
7th July 1873 ...	410	61	118	...	...	...	17	17	1	...	
22nd do. ...	411	61	118	...	...	1	16	17	...	...	
23rd do. ...	410	61	118	1	...	...	15	17	...	...	
24th do. ...	409	61	118	...	...	1	17	17	...	...	
25th do. ...	406	61	118	...	...	1	19	17	...	...	
1st August 1873...	409	61	117	...	...	1	16	17	...	...	

THAYETMYO, (Signed) R. HUNGERFORD, Surgeon-Major,
15th September 1873. H. M.'s 45th Regt. S.F.

Table showing the Percentage of Attacks and Deaths from Cholera to Strength, and also the Number married and unmarried.

	Men.	Women.	Children.
Strength ...	447	62	117
Attacked ...	14	2	7
Died ...	8	2	3
Percentage of attacked to strength ...	3.13	3.22	5.98
Do. of deaths to do. ...	1.78	3.22	2.56
Do. of do. to attacked ...	57.14	100	42.85
Married ...	4	2	...
Unmarried ...	10	...	...
Percentage of married attacked to strength ...	6.45	3.22	...
Do. of unmarried do. ...	2.59	...	...

THAYETMYO, (Signed) R. HUNGERFORD, Surgeon-Major,
15th September 1873. H. M.'s 45th Regt. S.F.

Daily Nominal Register of Cholera in Her Majesty's 45th Regiment Sherwood Foresters, Thajetmyo, 15th September 1873.

Date, 1873.	Rank.	Names.	Age.	Company.	Previous Health.	Habits.	Period of Service in India.	Whether Married or Single.	Hour of Admission.	Date and Hour of Attack.	Whence admitted.				Result.		
											Barrack Number.	Married Quarters.	Hospital and Cause of Original Admission.	Camp at Tyranagoon.	In Stage of Collapse.	In Stage of Reaction.	How long after Admission.	Recovered and Date.
1873.	Mrs.	Maher	30	E	Indif-ferent.	Tempe-rate.	Y. M. 6 11	M.	6-30 A.M.	Uncertain	11	No. 9 room.	..	Yes.	..	6½	1873.
12th April...	Private.	William Cox	31	H	Good.	Do.	8 6	S.	Do.	12-30 A.M., 20h April 1873.	7	..	..	..	Yes.	40	..
20th do...	Child.	Letty Brown	8	E	Delicate.	Do.	8 0	..	6-30 P.M.	4 P.M., 21st April 1873.	Staff Serjt's Qrs.	..	..	..	..	..	30th April.
21st do...																	
23rd do...	Mrs.	Mayhury	34	F	Good.	Do.	9 7	M.	6-30 A.M.	3 days before ad-mission.	9	..	..	Yes.	..	31	..
23rd do...	Private.	B. E. Cox	31	F	Do.	Do.	13 1	S.	Do.	Midnight, 27th April 1873.	5	West end room.	..	Yes.	..	14½	8th May.
28th do...	Do.	W. Massey	37	F	Fair.	Intem-perate.	8 4	M.	1 A.M.	1873.	7	..	..	Yes.	..	..	..
28th do...	Do.	Simon Dwyer	25	H	Do.	Do.	4 4	S.	2-15 P.M.	2 P.M., 28th April 1873.	Guard-room.	..	..	Yes.	..	9½	..
28th do...	Do.	John Griffith	39	G	Good.	Do.	13 3	M.	2-30 P.M.	Between the hours of 7 and 8 A.M., 28th April 1873.	5	..	..	..	Yes.	28½	..
28th do...	Do.	John Kennedy	31	F	Do.	Tempe-rate.	8 5	S.	5 P.M.	8 A.M., 28th April 1873.	..	..	..	..	..	..	12th May.
28th do...	Do.	Thomas Pry	35	F	Do.	Intem-perate.	13 8	S.	8-30 A.M.	Uncertain	..	..	Tyran-goon.	..	..	..	8th do.
29th do...	Do.	Edward Hunter	37	E	Do.	Do.	8 5	M.	8-15 A.M.	Do.	10	No. 8 room.	..	Yes.	..	8½	..
29th do...	Do.	Charles Ward	29	E	Indif-ferent.	Tempe-rate.	8 5	M.	11 A.M.	8 A.M., 29th April 1873.	10	No. 13 room.	..	..	..	..	20th May.
29th do...	L. Sjt.	Ezekiel Gould	31	E	Good.	Intem-perate.	8 5	S.	8-30 P.M.	11 A.M., 29th do. ...	8	West end room.	..	..	..	..	7th do.
12th May ...	Child.	William Lynch	6	G	Delicate.	Tempe-rate.	6 0	S.	8 P.M.	Between hours of 6½ 7 P.M., 12th May 1873.	13	No. 2 room.	..	..	Yes.	11½	..

Table showing the Buildings in which Cholera appeared, the Number attacked in each, and the Order in which cases occurred.

Number of Buildings.				Number at- tacked in each Build- ing.	Date of Admission.	Number of Case.
No.	1. Male Hospital...	...	...	...	...	...
"	2. Female do.	...	...	1	1st August 1873	23rd case.
"	3. School	...	...	...	...	...
"	4. Library	...	...	1	24th July "	21st case.
"	5.	...	...	2	28th April "	6th and 9th cases.
"	6.	...	...	1	23rd July "	19th case.
"	7. Single-men's Barracks ...	...	...	2	20th and 28th April 1873...	2nd and 8th cases.
"	8.	...	...	1	29th April 1873	12th case.
"	9. Band	...	...	1	24th " "	5th case.
"	10.	...	...	4	29th April, 23rd July, and 25th July 1873	10th, 11th, 20th,* and 22nd cases.
"	11. Married Quarters	...	...	1	12th April 1873	1st case.
"	12.	...	...	...	...	...
"	13.	...	...	2	23rd April and 12th May	4th and 14th cases.
1.	14. Serjeant-Major's Quarters ...	...	...	...	...	...
2.	15. Band Master's do.	...	...	1	21st April 1873	3rd case.
3.	16. Staff Serjeants' do.	...	...	...	...	...
1.	17. Guard-room	...	...	1	28th April 1873	7th case.
{	18. Cells	...	...	1	7th July "	18th case.
At Tyrangoon.						
On march				1	28th April 1873	13th case.
Canteen				1	30th May "	15th "
Married Quarters				1	1st June "	16th "
Single-men's do.				1	6th do. "	17th "

THAYETMYO,
15th September 1873.

(Signed) R. HUNGERFORD, Surgeon-Major,
H. M.'s 45th Regt. S.F.

REPORT ON THE EPIDEMIC OF CHOLERA IN F BATTERY, 20TH BRIGADE, ROYAL ARTILLERY,
STATIONED AT THAYETMYO, BRITISH BURMAH, IN THE MONTHS OF JUNE AND JULY
1873, BY SURGEON WILLIAM ROBERTSON, M.B., IN MEDICAL CHARGE OF THE
BATTERY.

*Outline of the Epidemic from its First Appearance in the Pegu Division of British Burmah, till its Outbreak
among the Troops stationed at Thayetmyo.*

The epidemic of cholera which prevailed during the present year among the European troops stationed at Thayetmyo made its first appearance in the Pegu Division of the Province of British Burmah in the month of February last, and took its origin, as in the epidemic of 1870, in the district of Mya-noung, a large and populous tract of country lying along the course of the Irrawaddy. The position of the chief town of this extensive district will be found indicated on the accompanying sketch map. From this part of the river valley, as from an endemic focus, the disease was carried both up-country and down along the grand line of internal traffic, attacking the numerous towns and villages which occupy both banks of the river. It thus extended its influence in a downward direction as far as the town of Dalla, opposite Rangoon ; but the upward course of the epidemic more immediately falls within the scope of the present report, and accordingly I shall confine myself to tracing its gradual invasion of the district and ultimate appearance within the cantonment of Thayetmyo. I may add that my position as Acting Civil Surgeon in the early part of the year brought me into immediate acquaintance

* After return from Tyrangoon.

with several of the first instances of the disease imported from the infected localities, and statement made in connexion with these cases may be implicitly relied on; but with regard to the number of deaths from cholera, which are further given as having occurred in the outlying villages of this district, and which are extracted from official records, I must confess that, owing to the very imperfect machinery of registration, I place but little confidence in their entire accuracy—a lack of confidence shared, as will be seen later on—by the highest functionary in the province.

On the 4th March a telegram was received by the Deputy Commissioner of this district from the corresponding official at Prome (pop. 24,000), reporting that cholera was prevalent in that town, and at the same time intimating the probability of the disease being introduced into the Thayetmyo District through the agency of persons travelling along the main road in the direction of the frontier. I may add that Prome is situated on the left bank of the river, 40 miles below Thayetmyo, which lies on the right bank (see map).

On the 18th March a fatal case of cholera, occurring in the person of a wayfarer bound for up-country, was reported at Do-yeng-ga-bo (pop. 184). This small village, distant 26 miles from the cantonment, is occupied by the first Police Station which the traveller on the main road from Prome encounters with in the Thayetmyo District.

On the 15th March a death from cholera was reported at Minday, a small hamlet situated about seven miles west of the cantonment. No cases had previously been reported in any part of the district on this side of the river; and even at Kama (pop. 300), a village situated on the river bank 20 miles below Thayetmyo, the disease does not appear to have shown itself till the 7th of April.

The village of Minday consists of only a few houses occupied by about thirty persons. It lies six miles inland from the river in a very secluded position, being hemmed in by steep jungle-covered hills on all sides except towards the east, that is in the direction of Thayetmyo. At this point a gap between two of the enclosing spurs permits the passage of a rough cart-track, by which alone the inhabitants maintain communication with the outer world. The isolation of the spot, and its remoteness from the great lines of internal communication, give the outbreak here somewhat the appearance of a re-visitation of a previous epidemic, rather than a fresh introduction of the disease. But still it is open to say that a rigid inquiry into all the circumstances would evoke the fact that communication by persons or material had taken place with the infected localities lower down the river. Yet it seems strange, if such were the case, that no intermediate locality should have given evidence of infection if the cholera germs were really carried through it. It ought to be explained that there is no public road on the right bank of the river as there is on the left—nothing but cart-tracks of a very primitive description between neighbouring villages.

But the dissemination of the cholera virus was not likely to be confined solely, or even chiefly to persons travelling by land. The great river highway played a very important part in the propagation of the disease. The numerous trading boats which covered its broad waters at all seasons of the year proceed on their voyage in the most leisurely manner, halting at almost every town on their route, and always laying to for the night in proximity to some village or fishing station, with the inhabitants of which the crews enter into the freest intercourse. In this manner any infectious disease which the crews of trading boats contract in one village is carried on to the next up or down the river as the case may be. Thus, too, the first cases of cholera which were introduced into the town of Thayetmyo were brought up the river in boats from Prome.

On the 15th March a boat arrived here from Prome with one of its crew said to be ill of cholera. The man was landed and conveyed to a house in the centre of the native town, where he died the same evening. In my capacity as Acting Civil Surgeon I made an investigation into the case the following day—the case not being reported till then—and no doubt was left on my mind as to the man's death having resulted from cholera.

A strict watch was now kept on all boats arriving from down the river; and on the 19th March I was requested by the Deputy Commissioner to visit a man reported to be lying ill of cholera in a boat which also had arrived from Prome. On proceeding at once to inquire into the case I found that the sick man had already been landed, and that he was lodged in one of the temporary huts which native fishermen

are in the habit of erecting on the extensive sand bank left exposed in front of the town before and after the rains. There could be no doubt as to the nature of the man's illness—he was in the stage of collapse from cholera—even if the previous history had not been so clearly ascertained. Being allowed to remain in the hut to which he had originally been conveyed, and being carefully tended by his friends, the patient made a good recovery.

On the 21st March a boy, aged eight years, a resident in the town, was alleged to have died of cholera. The case was not reported till two days later, when
Reported death from cholera in native town—21st March. I made inquiries of the boy's relatives, but failed to obtain satisfactory evidence as to the exact nature of the fatal illness.

On the 31st March I repaired to the village of Yua-doung (pop. 1,100), situated on the left bank of the river, and almost directly opposite this station, for the purpose
Cases at Yua-doung: of inquiring into certain cases of cholera rumoured to have occurred in that quarter. I obtained satisfactory evidence of the death by cholera, a few days previously, of two persons engaged in travelling up-country from the Prome direction. They had apparently been overtaken with illness while pursuing their journey along the main road, and had retired into the jungle near this village, where in a few hours they had succumbed to the fatal malady. The evidence as to cases of cholera among the inhabitants of the village itself was conflicting, some persons who had certainly not suffered from that disease being pointed out to me as having just recovered from the same train of symptoms which had terminated fatally with others. I find that no deaths from cholera have been reported by the Official Registrar at this village during the month of March, but on reviewing the whole of the evidence brought before me on this and subsequent occasions, I have no hesitation in stating my opinion that the official report is not absolutely correct.

On the 24th April, accompanied by Lieutenant Parrott, Assistant Commissioner (the officer who has kindly prepared the accompanying sketch map and plans for me),
Cases at Hton-doung. I proceeded to inquire into the rumoured existence of cholera at Hton-doung (commonly known as Cime village, population 340), a village situated about three miles below Thayetmyo on the same bank of the river and close to the stream. The villagers stated that eight persons had died of cholera within the last ten days. Here again I was shown as recent recoveries from that disease several persons who had apparently suffered from nothing more serious than sharp billious diarrhoea; but I was also taken to see a young man evidently in the stage of collapse from cholera. In looking over the official returns I find seven deaths reported in this village between the 22nd and 31st March, but none in April, and yet I feel confident the case I saw must have terminated fatally.

During the month of April very few deaths from cholera were registered in the district, and it may accordingly be inferred that there were not many cases of the disease. Thirteen deaths were reported in and around the united villages of Meaday and Allanmyoo (population 2,500), four at Minday, two at Kama, and two at Do-yeng-ga-bo. No case was reported in the native town of Thayetmyo, although, as has already been shown, the disease was introduced direct from Prome on two distinct occasions in the month of March. Again, during the month under review, the disease was imported a third time from that great centre of infection. On the 12th April a batch of prisoners was brought up from Prome by steamer, and amongst them was a man in the stage of collapse from cholera. From inquiries I made of the escort and of the other prisoners (I was then in medical charge of the District Jail) I learned that the wretched man had been suffering from vomiting and purging at the time of his embarkation the previous evening. He was conveyed through the native town and lodged inside the jail before I arrived to prevent his admission; but every sanitary precaution having been adopted, the disease happily did not spread among the other prisoners, the subsequent outbreak in the jail not taking place till the 20th June.

Summary of the Epidemic in the Cantonment and immediate neighbourhood.

In the month of April the disease first showed itself among the European troops. On the 12th instant a case (woman) occurred in the 45th Regiment Sherwood Foresters
Cholera breaks out in the 45th Regiment—April 12th. (Right Wing stationed here), and was followed on the 20th by a second case (soldier). During the remainder of the month every day or every alternate day furnished one or more cases, till at length the infected companies of the regiment were moved across the river to the temporary camp at Tyrangoon. This camp occupies a series of elevated ridges receding a little inland from the river between Yua-doung and Allanmyoo. On these breezy

heights, from which there is a charming prospect over the river to the jungle-covered hills beyond, a number of rough bamboo barracks have been constructed for the purpose of meeting any such emergency as that which now occurred. During the month the disease attained its climax in the regiment, there having occurred thirteen cases with seven deaths, distributed thus:—

	Cases.	Deaths.
Men	10	5
Women...	2	2
Children	1	...
Total ...	13	7

In the month of May there were only two cases (both fatal) in the regiment—one at Tyrangoon (soldier) and one at Thayetmyo (child).

In the month of June the disease showed itself among the followers of the Royal Artillery, from whom the infection soon spread to the men of the Battery. There Breaks out in Royal Artillery and among native followers. occurred six cases among the former (mostly children) and three cases amongst the latter with two deaths in each. In the 45th Regiment there were two cases with one death (child), a soldier having recovered.

On the 29th of this month (June) a fatal case of cholera was reported in the native town, and the inhabitants gave evidence of being impressed with the conviction that Breaks out in native town. the dreaded epidemic which had been hovering so long in their neighbourhood had at length found its way amongst them. During three successive evenings, as darkness closed in, they turned out in numerous procession, provided with every kind of implement calculated to make a noise, including drums, gongs, horns, guns, and fireworks of various kinds, while those who were not so wealthy or so fortunate as to possess these scientific apparatus for making night hideous, devoted their energies to the beating of empty wooden and tin boxes, or valiantly belabouring the sides of their huts with stout bamboos. The general effect at a distance was imposing enough, and had for its object to frighten away the "baloo" or evil spirit who wickedly scatters the seeds of cholera among inoffensive human beings. To show their earnestness in the matter, the people further imperilled the safety of the town by burning fires in front of their houses. Had a breeze sprung up on these occasions, and sent a few lighted embers flying among the highly inflammable materials of which the huts are composed, the probability is that the "baloo" would have been most effectually burnt out of his haunts. These highly praiseworthy exertions on the part of the inhabitants were attended at first with only partial success. They scared, but did not expel the demon, who continued to carry off a victim nearly every day till the 13th of the following month. Accordingly, under the direction of their spiritual guides—the Phoongyees (the least sacerdotal body of priests in the world), the people resumed their zealous efforts against the lurking fiend, and at length triumphantly succeeded in ousting him from their buildings, but not till he had carried off two additional victims on the 22nd. The total number of deaths in the town was only thirteen, which, in a population of about 9,000, gives the small proportion of 1·4 deaths per 1,000 inhabitants.

In the month of July the disease attained its greatest severity in the Royal Artillery and Progress of the disease in July. native followers: Three men of the Battery were attacked and two succumbed; three children were also attacked, and all died. Among the followers and other natives residing in the Syces' lines eighteen cases occurred—more than half of them children—with nine deaths. In the 45th Regiment there were five cases—two soldiers (both died) and three children—with one death. There were also during the month two cases in the European staff—both individuals resident in the cantonment. One occurred in the person of an officer of the Public Works Department, who recovered. The other case was that of Store Serjeant, who had long suffered from chronic diarrhoea. He was attacked on the 25th, and died two days later.

Single case in Sepoy Regiment. On the 19th July a fatal case of cholera occurred in the 1st Madras Native Infantry, the only one which occurred in the regiment during the epidemic.

Number of Cases of Cholera in the Cantonment and Town of Thayetmyo during the Month of July 1873.

TABLE I.

July.	Europeans, including Women and Children.						Natives, including Women and Children.					
	Royal Artillery.		45th Regiment.		Staff.		Followers, Royal Artillery, Natives of India.		Native Town, Burmans.		District Jail, Burmans.	
Date.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
1	...	...	...	...	...	...	...	...	...	...	...	...
2	...	...	...	...	...	...	...	...	1	...	4	3
3	...	...	...	...	...	...	...	...	1	...	2	2
4	...	...	...	...	...	...	...	...	1	...	3	1
5	...	...	...	...	...	...	1	...	1	...	1	...
6	...	...	...	...	...	...	2	...	1	...	2	1
7	...	...	1	1	...	...	...	...	1	...	2	2
8	3	3	...	...	1	...	...	...	1	...	1	1
9	...	...	...	...	...	...	6	3	1	...	2	1
10	...	...	...	...	...	...	3	2	...	...	2	1
11	1	1	...	...	...	...	1	...	1	...	...	...
12	...	...	...	...	...	...	...	...	...	...	1	1
13	...	...	...	...	...	...	...	...	1	...	1	...
14	...	...	...	...	...	...	1	...	...	...	...	...
15	...	...	...	...	...	...	1	...	...	...	2	1
16	...	...	...	...	...	...	...	...	...	...	...	...
17	...	...	...	...	...	...	2	2	...	...	...	...
18	1	...	...	...	...	...	...	...	...	...	1	...
19	...	...	...	...	...	...	1	1	...	...	...	...
20	...	...	...	...	...	...	...	...	...	...	1	1
21	...	...	...	...	...	...	...	...	...	...	2	1
22	...	...	1	1	...	...	...	...	2	...	2	...
23	...	...	1	1	...	...	...	...	...	...	...	...
24	...	...	...	...	...	...	...	...	...	...	...	1
25	1	1	1	...	1	1	...	...	...	...	...	...
26	...	...	...	...	...	...	...	...	...	...	...	...
27	...	...	...	...	...	...	...	...	...	...	...	...
28	...	...	...	...	...	...	...	...	...	...	...	...
29	...	...	...	...	...	...	...	...	...	...	1	1
30	...	...	...	...	...	...	...	...	...	...	...	...
31	...	...	...	...	...	...	...	...	...	...	...	...
Total ...	6	5	5	3	2	1	18	8	...	12	30	18

(NOTE.—The village of Tsa-Eing, a quarter of a mile from eastern limit of cantonments, had eleven deaths between 7th and 12th instant.)

The District Jail (whose position close to the native town is indicated on the accompanying plan) was not likely to escape the all-pervading influence of the epidemic, especially as the building was greatly overcrowded at the time. About 400 persons were confined within its walls, crammed into the regulated space, cubic and superficial, allowed for a little over 300. Cholera began its work of thinning off the unhappy overplus on the 28th June, when the first fatal case occurred. The next case took place on the 2nd July, and during that month there were thirty cases with eighteen deaths. The last case occurred on the 27th of the month.

In the village of Tsa-Eing (pop. 780) situated on the bank of the river about half a mile east of the Artillery lines, and separated from the native town of Thayetmyo by the village of Tsa-Eing. the breadth of the cantonment, there occurred eleven deaths from cholera between the 7th and 11th of July.

Course of the Epidemic in the Outlying District from 1st May to 31st July.

During the months of May and June no deaths from cholera were registered in any part of the district; but in the month of July the disease was very prevalent in the outlying towns and villages, more especially at Do-yeng-ga-bo, where, out of a population of less than 200, there were reported twenty deaths. At Meaday and Allammyoo eleven deaths were reported; at Bullay (pop. under 100) twenty-two, and at Pya-lo (pop. 878) eight deaths were registered as having occurred from cholera.

Up to the end of July the total deaths from cholera recorded in the district, exclusive of those which occurred in the cantonment, but including the fatal cases in the native town and jail amounted to 106 males and 79 females, total 185. This number, in a population of over 126,000, gives the proportion of 1·4 per 1,000 (reputed) deaths from cholera—the same proportion as that already given for the native town.

Total cases and deaths in cantonment and native town during the epidemic?

I append a table which shows at a glance the total number of cases and deaths within the cantonment limits and in the native town and jail during the late epidemic.

	Royal Artillery	45th Regiment	European Staff	1st Madras Native Infantry	Followers Royal Artillery	Native Town	District Jail	Total	
Cases	9	23	2	1	24	*	31	90+1*	90+1*
Deaths	7	18	1	1	11	13	19	64	

Retrospect of previous Epidemics in this part of Burmah.

At this point it may not be altogether uninteresting, or even unprofitable, to pause in the narrative of the present outbreak and pass briefly in review the history of cholera as it has occurred amongst our troops in this part of Burmah from the earliest period when nearly fifty years ago a British Army forced its way up-country to within a few miles of the capital of Ava.

In consequence of the frequent recurrence of the disease one is led to the belief that cholera is as much endemic in the valley of the Irrawaddy as it is in that of the Ganges. I regret that my sources of information are so meagre, the only books of reference I have at hand being "A Memoir of the campaigns of Major-General Sir Archibald Campbell's Army in Ava, by Henry Havelock, Lieutenant, 13th Light Infantry"—a name better known thirty years later; "The Second Burmese War, by Lieutenant W. Laurie, Madras Artillery," and an old sanitary report book by the Senior Medical Officer at this station, the reports, however, ending with the year 1859. The years 1869-70 I have the reports of the Army Medical Department to refer to.

During the first Burmese war, when the British troops broke up their entrenchments at Prome and commenced their march against the great native stronghold at Meaday, cholera was at the time (December 1825) very prevalent among the inhabitants along the line of country through which the invading force had to march. On arriving at the gates of the vaunted fortress—vaunted as impregnable—our troops discovered that it had been evacuated by their Burman antagonists, amongst whose masses, while cooped up within the narrow limits of the place, cholera had committed fearful havoc, ample evidence as to the appalling extent of the disease being presented by the large numbers of dead and dying left inside the works. When cholera was thus rife on every side, it was not to be expected that the conquering army should escape its fatal influence, and we find accordingly, that the British troops suffered considerably, though to what extent I have no definite information.

In the second Burmese war our troops were happily not exposed to those obnoxious climatic influences which they had been called upon to encounter in the previous campaign, when our military authorities were in total ignorance of the character and resources of the country into which they were about to carry our arms. Steam power had attained a development unknown twenty-seven years before, and our leaders availed themselves of its capabilities to the fullest extent. The operations of the campaign in the interior of the enemy's country were confined entirely to the course of the river, and were carried on by a flotilla of gun boats having a light draught. In this manner Prome was captured, and the naval force pushing farther up the river, again took possession of Meaday, which, however, they did not attempt to retain. I can find no record of cholera having at any time appeared in the force thus employed.

When peace was concluded in 1853, and the boundary line settled between British and independent territory, the old fort at Meaday was strengthened and enlarged so as to contain a considerable garrison of European and Native troops. In the course of the following year (1854) the greater part of this force was transferred to the more open and extensive ground on the right bank of the river occupied by the present cantonment of Thayetmyo, a guard of two European Companies and a Native Regiment being left to protect the ordnance and other stores still kept at Meaday, pending the completion of the fort which was being erected near the new cantonment. During the period of our occupation of the fort (several years) cholera seems to have been a frequent visitant. The old neglected graveyard within the walls (the disgraceful condition of which is a standing reproach to British authority) bears doleful testimony to the fatal ravages of the disease. Inscriptions—almost obliterated, and too frequently even detached from the tombstones to which they were originally affixed—tell of many a brave but unfortunate man done to death by an insidious foe more formidable to our troops than the whole barbaric might of Ava.

The present cantonment of Thayetmyo has been liable to visitations of cholera from the time

when it was originally cleared from its native jungle ; but during the first two or three years of its existence as a station, the disease, though occurring every year, seems to have been altogether less severe than it has shown itself in latter years, the cases happening at that early period being both fewer in number and milder in character.

In 1854 only five or six mild cases are reported in a force at least four times more numerous than that which presently garrisons the station. The cases occurred in the hot weather.

In the official year 1855-56 I find that Her Majesty's 29th Regiment, with an average strength of 886, had ten cases of cholera with two deaths. In the following year, 1856-57, the same regiment, with an average strength of 992, had five cases with one death. It should be added that during both years the regiment furnished the detachment of two companies which garrisoned Meaday, and some of the cases included in the above may have occurred on that side of the river, no distinction being made in the returns before me. I have ascertained incidentally, however, from another source that a number of cases of cholera did occur in the station at this period.

In 1857-58 the Native (Madras) troops, with an average strength of about 2,000 men, had forty-seven cases of cholera with twenty-two deaths.

In the year 1858-59 there were twenty-two cases among the same troops with ten deaths.

Again in the year 1859 I find it stated that from the 7th March to the 12th June forty-six cases of cholera with twenty-one deaths occurred among the Native troops.

In Dr. Rankine's report for the year 1858-59, he thus alludes to the occurrence of cholera in the station during the previous years of occupation. "The existence of epidemic cholera must not, however, be passed over without remark. A few cases of the disease having occurred each year of residence in the hot months of April, May, and commencement of June, these may be safely termed the epidemic months of the year." Since that remark was written, the epidemic months have been extended to the whole of June to July, August and early part of September. I regret my inability, from want of records, to give an outline of the course of cholera during the decennial period from 1859 to 1869.

In 1869 (the rainfall of which year is said to have been scanty till September, and the heat very oppressive) cholera was epidemic over almost the whole of British Burmah. The disease was distinctly traced to having been introduced from Mandalay, the present capital of Upper Burmah, where it had been prevalent since the hot weather of the previous year. In Thayetmyo the first case occurred in the month of April in the cooly lines just outside the cantonment. On the 8th of May the disease appeared in the Wing of the 76th Regiment, and skipping the month of June, cropped up in the same regiment at intervals during the months of July, August, and September.

The cases and deaths in the regiment were as follows :—

	Cases.	Deaths.
Men	12	4
Women	4	2
Children	6	6
	22	12

The Royal Artillery and Native Infantry Regiment had entire immunity from the epidemic.

In the district of Thayetmyo the death-rate from cholera was 3·95 per 1,000.

In 1870 cholera was again epidemic among the troops stationed here. It broke out in the district of Mya-noung, the part of the country in which it broke out this year, early in January, and in the following month made its appearance in the Thayetmyo District, at the village of Yua-doung (distant two miles), where it remained localized for two months. It was next heard of in the cooly lines (the seat of the previous year's outbreak), where a man died from the disease on the 4th April. It raged among the troops from 7th April to 5th July with the following results :—

	7th Regiment.		Royal Artillery.	
	Cases.	Deaths.	Cases.	Deaths.
Men	28	21	8	6
Women	2	2	1	1
Children	2	2	3	3
	32	25	12	10

In the district of Thayetmyo 209 deaths, or 1·6 per 1,000 of population, occurred during the same epidemic.

Again the sepoy regiment escaped infection.

The year 1871 was marked by no case of cholera among the troops, and yet there were registered in the surrounding district twenty deaths from that disease. In the Prome District, with a population of over 251,000, six deaths were reported, and in the district of Mya-noung, having a population of over 435,000, there were registered 69 deaths from cholera. With reference to these returns and those already given from official sources regarding the number of deaths from cholera among the civil population, I may take the opportunity of quoting from the Chief Commissioner's resolution on the sanitary report for 1871. "The returns he (C.C.) regrets to say he can place little reliance on, and it is quite impossible, as the Sanitary Commissioner points out, that we can expect to obtain accurate statistics of births and deaths in a country with such a scattered and comparatively small population as British Burmah." Again, "throughout the province there were only 162 deaths from cholera, and it seems very doubtful whether the majority of these were cholera, for 140 of them are said to have occurred in the Pegu Division, where no epidemic of cholera was reported during the year; the cases were probably severe bowel-complaints." Considering that the death returns are prepared by native villagers unpossessed of any medical knowledge whatever, it will be seen how very little confidence can be placed on the diagnosis of such unskilled registrars.

Last year (1872), to the best of my recollection, only two deaths from cholera were reported as having occurred in the district. For my own part I do not believe they were cases of cholera at all.

Description of the Royal Artillery Barracks and Syces' Lines.

Before proceeding with an account of the epidemic as it occurred in the battery and amongst the native followers, it will be advantageous to give a short sketch of the quarters occupied by the former and the lines inhabited by the latter, having special regard to the sanitary conditions of both. At the same time the accompanying plan will convey an exact idea of the relative position of the different buildings to each other and to the syces' village (the original focus of dissemination in the Royal Artillery lines), and thereby facilitate the due understanding of the erratic course pursued by the epidemic. The disease showed itself in both of the single men's barracks, in the married quarters, and in the Staff Serjeants' quarters—in short, in all the buildings occupied by the battery, though it did not remain persistent in any one of them.

The single men of the Royal Artillery are quartered in two barracks, marked Nos. 1 and 2 on the plan. The buildings (like all the barracks in this station and indeed in Burmah) are constructed entirely of wood, are elevated $10\frac{1}{2}$ feet above the ground, and are so well ventilated that I do not think any improvement could be effected in that respect. They consist of one long apartment, which is made up of a central division and two flanking inner verandahs, the whole forming but a single room of great size and capacity. The main buildings are protected on all sides by broad outer verandahs. The only objectionable point in the internal arrangements consists in the men's cots being placed in four parallel rows lengthwise to the building. Thus there are two lines of cots down the central division of the room and one line down each of the inner verandahs. The cubic and superficial space are both ample, averaging 2,180 cubic feet and 108 superficial feet per man.

No. 2 barrack is divided into two equal and separate divisions by a transverse wooden partition, which extends completely across the building. The space included in the eastern half is sub-divided into three apartments, which are respectively occupied as reading-room, corporals' mess, and coffee shop. The only persons who sleep on this side are the three men entrusted with the duties connected with these rooms. The western division alone is occupied as quarters for the men.

The building marked No. 3 on the plan is the married quarters. Its general construction is the same as that of the single men's barracks, only that the building is divided into separate apartments for families—fifteen in number. The general arrangements, as regards lighting, ventilation, &c., are excellent, and leave nothing to be desired. Each family quarter consists of two rooms, which have a united superficies of 544 square feet and a cubic capacity of 6,240 cubic feet. These measurements allow for a married couple, with three children, a superficial area per head of over 100 square feet and a cubic space of over 1,200 cubic feet. The block called the Staff Serjeants' quarters, marked No. 4 on the plan, contains apartments for three separate families, each of which has a somewhat larger superficial area and cubic space than those of the ordinary family quarters.

The barracks are built on sufficiently elevated ground to prevent water lodging near them

and they are kept scrupulously clean both inside and out. The surroundings are good, except to the north. At this point, as will be seen on the plan (of the cantonment), the station graveyard lies in unpleasant proximity, while the intervening ground is wet and swampy at this season of the year.

The latrines and urinals (separate for all family quarters) are cleaned out regularly twice a day, and are kept at all times in excellent sanitary condition.

The syces and grass-cutters of the battery (mostly Madrassesees) occupy a village situated at a distance of about 400 yards north-east of the Royal Artillery lines (see plan of the cantonment), a position to leeward of the Artillery Barracks during the continuance of the S. W. wind—the wind which generally blows at this season of the year. The huts are disposed in five parallel rows running north to south about 150 yards long, with lanes 10 or 12 yards wide between each. They are constructed mainly of bamboo and matting with thatched roofs, and are with very few exceptions in a very dilapidated condition. The floors are not composed of a bamboo framework elevated above the ground as they are in the native Burman huts, but are formed on the bare ground according to the fashion prevalent on the opposite side of the Bay of Bengal. The huts are of various shapes and sizes, and there is no supervision as to the number of persons lodged in each; but, as the incidental ventilation is always very ample, the evil effects of over-crowding are less conspicuous than otherwise they would be.

The site of the village is far from good. It stands on the bank of a nullah on heavy black soil, and in close proximity to the station graveyard. The surface drainage on the south side is bad, but to the north and east a ready escape is afforded to rainfall by the natural slope of the ground in the direction of the nullah which hems it in on all sides except on the south. The proximity of this nullah is highly objectionable from a hygienic point of view. Its easy accessibility affords an irresistible temptation to the filthy and indolent native to convert it into a latrine. Its bed is quite dry for about nine months of the year, but in the height of the rains it is flooded by the rising waters of the river, and the collected impurities of the previous months are happily swept away.

The village has occupied its present site for the last 17 years, and the soil must be by this time deeply impregnated with accumulated filth. Such was the general local feeling regarding the condition of this village during the recent epidemic that I have reason to believe many honorable and well-meaning people would have expressed gratification rather than regret had some native Erastosthenes sought a temporary renown (though he would probably have found the District Jail) by burning down the plague-haunted spot.

The population of the village amounts to 700, that number including many other persons besides the native followers of the battery. These last, syces, grass-cutters, &c., amount to 212 individuals, and their families include 158 infants and young children, which brings the total number of native followers up to 370. In addition to these persons directly connected with the battery and entitled to medical relief, there is a heterogeneous collection of unemployed persons dependent, in true native fashion, on some money-earning relative. These waifs, with the families of certain persons employed privately in the station, complete the total number of 700. During the epidemic the whole population of the village had recourse to the hospital under my charge for medical aid and treatment.

Conservancy.—Separate latrines for men and women are provided in the northern extremity of the lines near the edge of the nullah. These latrines are cleaned out twice a day by a regular staff of mehters.

Outbreak of the Epidemic in the Royal Artillery.

The Royal Artillery and native followers escaped the contagious influence of the epidemic, as already pointed out, till the month of June. On the morning of the 19th of that month two cases (children) occurred in the syces' lines. On the 24th two more cases were brought to hospital, one (a child) from the syces' lines and one a horse-keeper living in the Commanding Officer's compound, where he had been resident for several weeks. Next day, 25th, two more cases, also children, occurred in the syces' lines, making a total of five cases (all children) from these lines and one (an adult) from within the cantonment itself.

On the 24th June the first case occurred among the Europeans. At 7 o'clock in the evening of that day Gunner Hartnell presented himself at hospital with highly suspicious symptoms. He stated that he had been frequently purged since 5 A.M., and also that within the last hour or so he had vomited several times.

(1)—Gunner Hartnell's case.

He had an extremely worn and exhausted appearance, and very shortly after admission symptoms occurred which left no doubt whatever as to the true nature of his illness. The vomiting and purging assumed a decided choleraic character, severe cramps set in, and at an early hour next morning he was in the stage of collapse. He never rallied from that condition, and died at 8 A.M. (25th). This man was admitted from No. 1 barrack.

On the following morning (25th), at 6 o'clock, Driver McGinness was admitted from No. 2 barrack. He stated that he had gone to bed in his usual health (he was reported by his comrades to have eaten a hearty supper), and that he was awakened with an urgent desire to go to stool at midnight, from which hour till admission he had suffered from vomiting and purging. Being too exhausted to walk to hospital, he was conveyed in a dhooly. Cramps set in almost immediately on admission, and after a severe struggle for life he succumbed in the stage of collapse at 11 o'clock the same night.

Contemporaneously with the last admission Bombardier Burley, who slept in a bed next to Driver McGinness, was admitted into hospital and placed under observation on account of a sharp attack of diarrhoea which he stated had come on at 5 A.M. (I have since learned that he had suffered from diarrhoea even the day before). In spite of various remedies the purging continued, with more or less activity, during the remainder of that day (25th), the whole of the 26th till 2 A.M., on the 27th, when the infection unfolded its real character as an attack of cholera. The case was not a severe one, and the patient made a good recovery. As the man had such well marked symptoms of premonitory diarrhoea, I date his attack from the 25th, the day on which he came under observation.

The remainder of the month brought no fresh cases either among Natives or Europeans. There was a lull in the outbreak for ten days among the former and thirteen days among the latter.

On the 5th July the disease broke out afresh in the syces' lines. On that day one case occurred; on the 6th two more cases were brought to hospital; on the 9th six more (see Table III.), there being in all eighteen cases between the 5th of the month and the 19th, on which day the epidemic finally ceased among the native followers.

On the 8th July the disease again found its way into the European quarters. Three (3) cases occurred amongst the children of soldiers. The first admission took place at 6 A.M. from the Staff Serjeants' quarters, and the two others simultaneously at 4 P.M. from the married quarters. All these cases terminated fatally, one of them after an illness of little over ten hours.

Late on the night of the 11th instant (11 P.M.) Gunner Bowles came to hospital with well marked symptoms of cholera. He stated that he had been purged very sharply three or four times in succession between 8 and 9 o'clock, and that feeling exhausted he lay down on his cot to sleep. Shortly before 11 he was roused by an urgent desire to go to stool, but directly he got out of bed the contents of his bowels were shot violently into his sleeping drawers. At the same time he was seized with sharp cramps in the calves of the legs. This was a severe case, all the symptoms of the disease being present with great intensity from the moment of admission. The patient fell rapidly into a stage of collapse and died at 7 o'clock next morning. This man was in charge of the coffee shop in the eastern division of No. 2 barrack, and slept in the verandah in front of it.

There followed a lull in the disease for a week—till the 18th. At 5 P.M. on that day Driver Raven, who stated that he had suffered from diarrhoea since 1 P.M., was admitted into hospital. In compliance with my oft-repeated instructions, he had twice in the course of the afternoon reported himself to the Apothecary for astringent medicine, but the remedies then employed having failed to check the disease, he was detained for more energetic treatment and for observation. The diarrhoea continuing in spite of all remedies, the case came to be viewed with suspicion, and the patient was isolated accordingly. At 10-30 P.M. the true nature of the attack was definitely settled. Choleraic vomiting and purging set in, followed shortly after by cramps. At 6 o'clock next morning he had sunk into collapse, which was of that almost fatal description known as "intense" in the Official Memorandum on collapse, Government Resolution No. 2,846 of 5th October 1870. For several hours his life hung in the balance. Gradually, however, the powers of vitality re-asserted themselves, and about 11 A.M. re-action was established.

(Returned to duty 10 days later.) He passed through the period of secondary fever without any complication, and was discharged on the 31st as convalescent, but has not yet (September

10th) regained his former health and vigor. This case was the second and last admitted from No. 1 barrack.

The last case in the epidemic occurred on the 24th July. At noon of that day Gunner Lyons (9)—Last case—that was admitted from the married quarters. He stated that he had been of Gunner Lyons. compelled to get up at 4 A.M. to go to the rear, and that he had subsequently been purged three times in the course of the morning. He further added that he had felt ailing since the previous day, a feeling which he ascribed to having eaten some lettuce at breakfast. He had gone about his duties as usual on the day of the attack, but shortly before noon he was seized with a sudden fit of vomiting accompanied with deadly faintness and attended with cramps in the calves of his legs. This happened in his own quarters, and his wife at once conducted him to hospital. For two hours after admission the symptoms of the disease remained almost entirely quiescent, but at 2 o'clock choleraic vomiting and purging set in. The stage of collapse was not severe, and I entertained hopes of a favorable issue. But the man was the object of hypertrophy of the heart, and some complication of that organ induced a sudden and fatal termination of the case at 10-30 P.M.

The epidemic lasted exactly one month, both among the men of the battery and the native followers. It will be observed that the epidemic lasted both among the native followers and the men of the battery for the period of exactly one month. In the former body the first case occurred on the 19th June, and the last on the 19th July; in the latter the first case was admitted on the 24th June and the last on the 24th July.

At no period of the epidemic was there the least panic. The duties and amusements of the men and followers went on as usual, and there was no exceptional resort to ardent spirits to supply a deficiency of manly pluck.

Statistics of the epidemic in the battery and among native followers. The following tables give the statistics of the epidemic in the battery with percentages:—

Europeans.

—	Strength.	Attacked.	Died.	Percentage of Attacked to Strength.	Percentage of Deaths to Attacked.
Officers	6	...	...	...	...
Men	147	6	4	4.0	66.6
Women	18	...	...	...	...
Children	43	3	3	6.9	100
Total ...	214	9	7	4.20	77.7

Native Followers.

—	Strength.	Attacked.	Died.	Percentage of Attacked to Strength.	Percentage of Deaths to Attacked.
Men	126	3	2	2.3	66.6
Women	94	2	...	2.0	...
Children	150	16	7	10.6	43.7
Total ...	370	21	9	5.67	42.86

NOTE.—Three (3) cases, with two deaths, which occurred among outsiders, but were treated in this hospital not included here. The ages of the children varied from three to twelve, giving an average of seven years. The large proportion of children attacked will be noticed.

Return showing the Number of Cases of Cholera in F Battery, 20th Brigade, R.A., during Epidemic from 24th June to 25th July 1878.

Strength on 24th June, Europeans 5, men 147, women 18, children 48, total 213.

Number of Case.	Date of Admission.	Rank and Names.	Age.	Previous Health.	Habits.	Period of Service in India.	Married or Single.	WHENCE ADMITTED.		How long suffering from Symptoms before Admission.	SYMPTOMS ON ADMISSION.					RESULT.			
								Barrack Number.	Married Quarters.		Premontory Diarrhoea.	Characteristic Vomiting.	Characteristic Stools.	Cramps.	Collapse.	In stage of Collapse.	In stage of Reaction.	How long after Admission.	Recovered and Date.
1	24th June	Gunner F. Hartnell	29	Good	...	5	S.	1	...	7 P.M.	...	Yes.	...	...	...	Yes.	...	13	...
2	25th do.	Driver J. McGinness	28	Do.	...	9	S.	2	...	6 A.M.	Yes.	Yes.	...	...	...	Yes.	...	17	...
3	27th do.	Bombardier W. Burley	39	Do.	...	1½	S.	3	...	2 A.M.	...	...	...	...	...	...	...	...	9th July
4	8th July	Boy F. Huggins	6	Indifferent	...	Born India.	...	...	2	6 A.M.	Yes.	...	...	...	...	...	...	32½	Dischd. Conv.
5	Do.	Boy W. Germain	12	Good	...	2½	...	...	1	4 P.M.	...	...	...	...	...	...	...	10	...
6	Do.	Girl A. Bedford	14½	Bad	...	Born India.	...	...	1	4 P.M.	...	Yes.	...	...	...	...	...	16	...
7	11th July	Gunner W. Bowles	34	Indifferent	...	13	S.	2	...	11 P.M.	...	Yes.	...	...	...	...	...	9	...
8	18th do.	Driver R. Raven	20	Good	...	1	S.	1	...	10 P.M.	Yes.	...	...	...	...	...	...	...	31st July
9	25th do.	Gunner M. Lyons	36	Indifferent	...	16	M.	...	1	12 noon.	...	Yes.	...	...	...	...	...	10½	Dischd. Conv.

NOTE.—Married Quarters No. 1 = No. 8 barrack divided into 15 family quarters.
Do do. No. 2 = Staff Sergeants' quarters divided into 8 family quarters.

Return showing the Number of Cases of Cholera among the Native Followers of F Battery, 20th Brigade, R.A., during Epidemic from 19th June to 19th July 1873.

Strength on 19th June 212 young children in families 158, total 372.

Number.	Date of Admission.	Names.	Age.	Sex.	Whence admitted.	Hour of Admission.	How long suffering from Symptom before Admission.	SYMPTOMS ON ADMISSION.					RESULT.			
								Premontory Diarrhoea.	Characteristic Vomiting.	Characteristic Stools.	Cramps.	Collapse.	In stage of Collapse.	In stage of Re-act-ion.	Died	Recovered and Date.
1	19th June.	Yellan	...	...	Syces' lines	8 A.M.	5	...	...	...	...	Yes.	...	...	...	6th July.
2	Do.	Thoyee	11	M.	Do.	8 A.M.	4	...	...	...	...	Yes.	...	...	12	...
3	24th do.	Jenaboo	3	F.	Do.	6 A.M.	4	...	...	...	...	Yes.	...	...	159	27th do.
4	Do.	Rungamah	6	F.	Do.	5 A.M.	3	...	Yes.	Yes.	Yes.	...	...	...	...	20th do.
5	25th do.	Verasawmy	25	M.	Comdg. Officer's compound	7 A.M.	1	...	Yes.	Yes.	...	...	...	...	...	7th do.
6	Do.	Thoyee	3	F.	Syces' lines	9 A.M.	3	...	...	...	...	...	...	...	...	...
7	5th July.	Yellamah	8	F.	Do.	6 A.M.	2	...	...	...	...	Yes.	...	...	17½	16th do.
8	6th do.	Thoolcaunum	27	F.	Do.	6 A.M.	2	...	...	...	...	...	...	...	...	Do.
9	Do.	Dooragoo	19	F.	Do.	6 A.M.	3	...	...	...	...	...	...	...	15	20th do.
10	9th do.	Minniamah	7	F.	Do.	6 A.M.	2	...	...	...	...	...	...	...	...	Do.
11	Do.	Ramasawmy	7	M.	Do.	6 A.M.	2	...	...	...	...	...	...	...	...	...
12	Do.	Thoolcaunum*	7	F.	Do.	6 A.M.	1	...	...	...	...	...	...	...	...	...
13	Do.	Rungiah	21	M.	Do.	6 A.M.	2½	...	...	...	...	...	...	...	...	...
14	Do.	Singaraivalloo	4	M.	Do.	6.30 A.M.	5	...	...	...	...	...	...	...	...	...
15	Do.	Jellamah	6	F.	Do.	11 A.M.	5	...	...	...	...	...	...	...	...	...
16	10th do.	Minian*	30	M.	Do.	2 A.M.	2	...	...	...	...	...	...	...	...	...
17	Do.	Isasawmy	4	M.	Do.	5 A.M.	2	...	...	...	...	...	...	...	...	...
18	Do.	Miniamah	11	F.	Do.	3 P.M.	3	...	...	...	...	...	...	...	...	...
19	11th do.	Sholapore	7	F.	Do.	9 A.M.	4	...	...	...	...	...	...	...	...	...
20	14th do.	Nagan	11	M.	Do.	3 A.M.	2	...	...	...	...	...	...	...	...	21st do.
21	15th do.	Voomey	7	M.	Do.	9 A.M.	4½	...	...	...	...	...	...	...	...	Do.
22	17th do.	Thoolcaunum*	35	M.	Do.	7.30 A.M.	3	Yes.	...	...	...	...	...	...	...	Do.
23	Do.	Colwah†	40	F.	Syces' lines	8 P.M.	3	...	...	...	...	...	...	...	...	...
24	19th do.	Yasooamah	12	F.	Camp of native followers.	10 P.M.	3	...	...	...	...	...	...	...	...	...

* Resident in Syces' lines, but not followers of the battery.

† Surreptitiously remained in the Syces' lines after their vacation had been ordered.

Precautionary and Sanitary Measures.

I.—AMONGST EUROPEANS.

Previous to the outbreak of cholera in the battery I had repeatedly given instructions that if

Every case of diarrhoea to be reported at hospital with the least possible delay.

any man found himself suffering from diarrhoea it was his duty to report himself at hospital for a dose of medicine with the least possible delay.

The disease, as already stated, showed itself among the Europeans on the evening of the 24th June. On the following morning, immediately after stables, I had the whole of the men paraded in their respective barracks, and urgently impressed on them the importance of immediate application at hospital in the event of any one suffering from looseness of the bowels or vomiting, reiterating the assurance that they were allowed to present themselves at any hour of the day or night, without waiting for escort by the battery orderly, or even without the trouble of dressing properly. "Come in your shirt sleeves if you like," I added, "but don't fail to come." These recommendations were repeated in the battery orders for the day, and the non-commissioned officers warned of their responsibility in seeing them properly attended to. To ensure a still further certainty of compliance, a sentry was posted over the single men's latrines for the purpose of reporting any man who should go to the rear oftener than twice in the twenty-four hours. It was also made incumbent on the orderly over the married quarters to report any woman or child visiting the latrines oftener than twice during the day, and married men were held responsible for their wives and families during the night. The men were further prohibited from entering the Syces' lines.

These orders were directed to be read once a week on parade during the continuance of the

Inspections of the men.

epidemic, and were verbally repeated by me in the course of my Saturday inspections. But my examination of the men was not at this period confined

to the mere routine of weekly inspections. I made a point of being frequently present in the lines, watching the men at stables both while engaged at work and when drawn up in a body at the conclusion of stable hour preparatory to marching off to quarters. Again I used to walk quietly round the barrack-rooms when the men were off duty for the day, to see if any one was lying down from the feeling of *malaise*, which often heralds an attack of cholera.

When a case of cholera was brought to hospital from barracks, the latrine which the man

Disinfection of latrine, &c., used by cholera patient.

had used was immediately cleaned out and freely sprinkled with carbolic acid or disinfecting powder. It was then fumigated with sulphurous acid obtained by burning several ounces of sulphur in pipkins. Further, the

man's bedding was conveyed out of the barrack-room and deposited in an out-house to undergo subsequent purification. The wall, floor, and fittings near his cot were well scrubbed with soap and hot water, and soused with a solution of carbolic acid. After which, the room having been vacated, the whole apartment was subjected to the searching action of sulphurous acid. I have since seen in the *Lancet* Sanitary Commissioner's report on disinfectants (26th July 1873) a statement, made in the authority of a writer in the *Chemical News*, that this conjoint use of sulphurous and carbolic acid afforded the greatest advantage in preventing the spread of the cattle plague, and I have no doubt its antiseptic powers are equally effective against other disease germs. When fumigation was completed the buildings were thrown open for a few days, then white-washed, and not re-occupied till the lapse of at least ten days. The only exception to this rule was No. 1 barrack, which was white-washed but not fumigated, and never completely vacated. The punkahs were removed and purified.

At no time during the epidemic were the men or families moved out under canvas, though

Evacuation of buildings.

most of the buildings where cases of cholera occurred were entirely vacated, accommodation being found for their late occupants elsewhere. I considered

it inadvisable to recommend such a course as camping away from the lines on soft wet ground, except on the clearest evidence that the cholera miasm had established itself within the building occupied by the battery. The sporadic nature of the cases militated against any such assumptions, though no precautions were omitted on that account. There is no good camping ground in this neighbourhood, the whole surface of the country outside the station being covered with thick jungle, while the few open spaces found within cantonment limits are composed of black heavy soil, and of course deeply saturated with moisture at this season of the year. Had the evacuation of the buildings been imperatively demanded, I should have advised a move to be made to the temporary barracks at Tyrangoon on the opposite bank of the river, and that too notwithstanding

the rumours as to the prevalence of cholera in the surrounding villages. Having thus advanced my reasons for not recommending the camping out of the battery or any part of it, I shall proceed to give in detail the different moves which were effected—mostly within our own lines—as each case or set of cases occurred.

The first case occurred, as already stated, on the 24th June in No. 1 barrack. The man's cot being situated in an inner verandah, the remaining cots of that row were removed to the open space underneath the barrack, and the men who occupied them protected at night from the damp winds which blow at this period of the year by a screen of matting and gunny bags. At the expiry of ten days they were allowed to return to their old quarters. No further cases occurred among the occupants of that row, and none in the same barrack till after a lapse of twenty-three days—on the 28th July.

The second and third cases (simultaneous) occurred on the 25th June, or one day after the first case, and were furnished by the western division of No. 2 barrack. This wing was cleared out, part of the men (13) being lodged in the library in the eastern half of the building, while the remainder, twenty-seven in number, were provided with quarters in the detail hospital, a building of the same general construction as the European barracks, and situated on an elevation about three-quarters of a mile west of the Royal Artillery lines. Though not immediately connected with the subject in hand, I may here state that pills of acetate of lead and opium were issued to the non-commissioned officer in charge of this detached party with plain directions as to their use; and with further instructions that, in the event of any man being still purged after taking one pill, he was at once to be marched to hospital. Both parties returned to their quarters in eleven days, and no more cases took place in this division of the barrack.

The fourth, fifth, and sixth cases (all children) occurred on the 8th July, the first case coming from the Staff Serjeants' quarters, and the two last from contiguous apartments (Nos. 1 and 2) in the married quarters. All these buildings were at once vacated, their late occupants being accommodated partly in the school-house and partly in the separate quarters provided for non-commissioned officers in the wings of the single men's barracks. Four (4) families, for whom shelter could not be procured elsewhere, were lodged underneath the family barrack. At the expiry of ten days the married quarters were allowed to be re-occupied after having been thoroughly purified. No more cases in the Staff Serjeants' quarters, but a third case was contributed by the married quarters on the 24th July, after an interval of sixteen days.

The seventh case was taken from the eastern division of No. 2 barrack on the 11th July, or sixteen days after the two cases already noticed had occurred in the western division of the same barrack. The three apartments in which that half of the building is divided were vacated, and not re-occupied till a period of twelve days had elapsed, complete purification having taken place in the interval. No further cases were admitted from this wing of the barrack.

The eighth case was the second and last instance of the disease which occurred in No. 1 barrack. The man slept in the central division of the room which I have shown to be lined with two rows of cots. These were removed and carried underneath the barrack as described on the occurrence of the first case. On the expiry of twelve days the men ejected were allowed to re-occupy their old quarters.

The ninth and last case was drawn from the married quarters No. 8 apartment. The quarters were again cleared out, and the families disposed of as formerly. After purification they were allowed to be occupied within a period of twelve days. On both occasions the families which had furnished the cases were isolated in the old school-room.

Table giving Description and Capacity of all the Buildings occupied by the Battery; also the Number of Cases of Cholera which appeared in each, with Dates and the Intervals between each Case or set of Cases.

	Number of Occupants.	Per Head.		Date of first Case or simultaneous Cases in each Building.		Interval to next Case in same Building.	Date of second Case or Cases in the Buildings.		Remarks.
		Cubic Feet.	Superficial Space.	Date.	No. of Cases.		Date.	No. of Cases.	
Single men's barrack No. 1	80	2,180	108	June 24th	1	24 days.	July 18th	1	
No. 2 { Western Division	40	...	...	" 25th	2	No more cases.			
	3	...	...	July 11th	1	Do.	do.		
Married quarters (Single quarters.) ...	Average 5	1,200	100	" 8th	2	16 days.	July 24th	1	Eastern division of No. 2 barrack occupied only by the three men in charge of reading-room, corporals' mess and office, shop.
Staff Serjts.' quarters. (Single quarters.) ...	6	...	...	" 8th	1	No more cases.			

Table showing the Order of the Days and Dates on which Cases occurred, with the intervals of free days in the Series.

EUROPEANS.

Order of each Case or set of Cases.	Number in each set of Cases.	Date of Occurrence.	Intervals to next set of Cases.	Remarks.
First	1	June 24th.	Days. 1	
Second	2	" 25th.	13	
Third	3	July 8th.	3	
Fourth	1	" 11th.	7	
Fifth	1	" 18th.	6	
Sixth	1	" 24th.	...	
	9		30 ÷ 6	Five days on the average between each case.

NATIVES.

Order of each Case or set of Cases.	Number in each set of Cases.	Date of Occurrence.	Interval to next set of Cases.	Locality where occurred.	Remarks.
First	2	June 19th.	Days. 5	Syces' lines.	
Second	2	" 24th.	1	Do.	
Third	2	" 25th.	10	Do.	
Fourth	1	July 5th.	1	Do.	One case from Commanding Officer's compound.
Fifth	2	" 6th.	3	Do.	
Sixth	6	" 9th.	1	Do.	
Seventh	3	" 10th.	1	Do.	
Eighth	1	" 11th.	3	1st Lamp.	
Ninth	1	" 14th.	1	Do.	
Tenth	1	" 15th.	2	Do.	One case from Syces' lines.
Eleventh	2	" 17th.	2	Do.	
Twelfth	1	" 19th.	...	Do.	
	24		30 ÷ 12 = 2.5	days on the average between each case.	

The three cases treated, not followers of the battery, are included in this table.

In the last epidemic (that of 1870) which visited the cantonment, the battery stationed here had twelve cases distributed among the respective quarters as follows:—

	No. of Cases.
No. 1 Barrack	5
No. 2 do.	...
Married Quarters	4
Staff Serjeants' Quarters	...
Cells	1
Hospital, Thayetmyo	1
Do. Tyrangoon	1
Total	12
	8

Distribution of cases among the buildings in the epidemic of 1870.

II.—NATIVES.

When the first cases were admitted from the Syces' lines the Hospital Dresser was despatched to fumigate the huts whence they had come, and also to make a house-to-house visitation for the purpose of discovering whether any other cases remained concealed from observation—a kind of inspection which was kept up at intervals during the epidemic. On the same day I ordered the whole of the inhabitants of the village to be assembled in front of it, and took the opportunity of urging on them the necessity of immediately coming up to hospital in the event of diarrhœa or vomiting occurring in their own persons or in those of their children; and I further warned the head man of the village that I should hold him responsible for proper attention to this simple injunction.

As fresh cases cropped up, the different huts implicated continued to be disinfected by the action of sulphurous acid, a general purification of every hut in the lines having been carried out on the 30th June.

These measures failing to arrest the progress of the epidemic, the complete evacuation of the native lines was effected on the 13th July. Advantage was then taken of the absence of the inhabitants to insure a thorough purification of every hut by means of fumigating and lime-washing.

When the question of evacuating the Syces' lines came to be discussed it was a matter of considerable uncertainty whether there was a sufficiency of tents in store to provide shelter for such a large number of persons (370) as were included among the native followers. The remainder of the inhabitants—those whose presence in the lines was unauthorized—were to be simply evicted and left to shift for themselves; and possibly in so doing to carry the disease elsewhere. On an application being made for native tents, twenty-nine were supplied. They were pitched on a site selected about equidistant from the infected village, the fort and the horse followers. lines (marked 1 on the plan of the cantonment), and at no great distance from any of these points. The position was not the best that could be desired, but it was the best available. It was partly sheltered by rows of trees, and the soil was tolerably dry on account of the slope of the ground.

There was a good deal of unavoidable overcrowding in some of the tents. Had all the individuals requiring accommodation been distributed equally throughout the tents, the average number of occupants would have been about twelve per tent. But some of the tents containing a smaller number of persons (all belonging to a certain caste who would not live under the same roof with those of inferior degree) others were burdened with a large occupancy than they were well fitted to receive. However no harm resulted from overcrowding. The ventilation was excellent, the sides of the tents being pegged up at an elevation of twelve to eighteen inches from the ground, and the doors kept constantly opened.

On a case of cholera being brought from this camp, the tent in which it had occurred was at once vacated, then fumigated, and after standing a few hours it was taken down and exposed inside out to sun and rain for twenty-four hours. When pitched again a different spot was selected, the old ground having been dug up. The late occupants were temporarily provided with a rough shelter of matting and bamboo.

There can be no doubt that this move was attended with beneficial results. Before it took place eighteen cases had occurred in the Syces' lines. Subsequent to the move only four cases were admitted from the tents, one of which occurred on the day after removal, leading to the presumption that the seeds of disease were probably imbibed prior to that event. After the orders for the evacuation of the village had been enforced, and a sentry posted to prevent re-entry, a horse-keeper contrived to elude observation and continued to sleep in nightly in his own hut. He was seized with cholera on the 17th and died next day.

At the end of a week the camp was shifted to another site (marked 2) on the plan of the cantonment), an elevated piece of ground on the river bank lying between the fort and the dhoby village. No cases occurred in the new camp, and after a lapse of five days the occupants of the tents were permitted to return to their own lines. They had thus spent twelve days under canvas, during which time they had completely shaken off the disease and had otherwise been healthy.

Hospital Arrangements.

I.—EUROPEANS.

On the occurrence of the outbreak in the battery a tent was pitched in the hospital compound for the reception and treatment of cholera patients ; but in the course of the epidemic it was occupied only by those individuals who, at the time of presenting themselves at hospital, were recognized as undoubted instances of choleraic infection. Cases merely suspicious were detained under observation in a separate ward in the regular hospital ; and when such cases developed into cholera, the patients were still, in deference to their earnest wishes, allowed to remain in the ward to which they had originally been conducted ; and in point of fact there was little necessity for removing them on the ground of preventing infection of the apartment. The mischief had already been done, as the premonitory diarrhoea is generally believed to contain the infecting virus in greater intensity than any of the succeeding stages of the disease.

The ward thus employed for the treatment of cholera patients had a capacity of 20,000 cubic feet, and, like the rest of the building, was exceedingly well ventilated. As each case was disposed of the room was thoroughly purified. The floor was well scrubbed with hot water and soap and sprinkled with carbolic acid, special attention being directed to the part in the neighbourhood of the patient's cot. The apartment was then subjected to the pervading action of burning sulphur. This process completed, the side doors were thrown open so as to allow of the freest perfation, while the doors and windows communicating with the interior of the building were kept shut. At the conclusion of the epidemic the walls were white-washed and repainted. The hospital tent was also purified on ceasing to be occupied by a case of cholera.

The patients were attended partly by the hospital servants, partly by extra hands specially engaged for the purpose, and in three instances by comrades who volunteered for the duty (any number of volunteers was forthcoming if wanted). The children were further attended by their own parents and the hospital matron. When a hospital servant left attendance on a cholera patient he was required to wash his hands and face, and change his clothes. Attention to this precautionary measure was also exacted of the European volunteers and parents of children.

A toty (sweeper) was kept constantly present in the ward for the purpose of removing the cholera discharges, all of which were received into vessels thickly sprinkled with disinfecting powder. These discharges being carried out of the ward were emptied into a latrine-pan deposited on the border of the waste land in rear of the hospital compound, and when a sufficient quantity had been collected the pan was conveyed 200 yards farther into the jungle, and its contents buried deep in the earth.

The patients' bedding, clothing, &c., were first subjected to fumigation by burning sulphur. They were then thoroughly washed with hot water and soap and exposed to the sun and rain for twenty-four hours. The same process of washing and bleaching was gone through a second time, the bleaching being extended over a longer period. Articles of little value were burned without further trouble, along with the straw of the mattresses and pillows.

The two men who recovered were allowed, on bathing and being furnished with a complete change of clothes, to enter the general ward, after having been convalescent for a period of seven days. This is earlier than many authorities recommend, but I am of opinion that the power of personally communicating infection ceases when convalescence is fairly established. Again, removal from an isolated apartment connected only with painful associations, and re-union with one's comrades, contribute powerfully to the more rapid restoration to health.

The native servants were kept at their work mostly by European supervision, which is absolutely necessary in such cases, while a general superintendence over every one employed was exercised by the Apothecary (Mr. James Smith), who was indefatigable by day and night in devotion to his duties, and of whose services I here desire to record my thorough appreciation.

The bodies of those who died were removed to the dead-house on an old bamboo cot, which is never used for any other purpose, and which always lies in the open air in a corner of the hospital compound. When a dhooly was used to bring a cholera case to hospital it was disinfected immediately afterwards, and kept for two or three days

exposed to the weather in the open air. The dead were conveyed to the graveyard on a gun carriage.

II.—NATIVES.

The battery followers were treated in the native hospital, situated in the same compound as the European hospital, and about seventy yards in rear of it. It is a wooded building with a thatched roof fairly ventilated, and has a capacity of 8,000 cubic feet. A tent was pitched near it for cases under observation.

The building was occasionally much overcrowded, there being at times as many as ten or eleven cases under treatment (six admissions took place in one day), on each of which an average of at least two persons were attending day and night. The overcrowding was obviated to some extent by sending such of the patients as were convalescent to be treated in the verandahs. All cases of ordinary disease were treated outside.

Two native orderlies and an extra toty was the inferior establishment of this hospital during the epidemic. But, as above stated, all the patients were also looked after by their friends, parents, or other relatives. Amongst these volunteer attendants it was simply impossible to enforce the rule as to washing and changing clothes, for few of them possessed any other clothing than that they wore. The wonderful exemption of the people from infection under circumstances so favorable to the action of the disease germ will be referred to again.

The regulations as to the disposal of choleraic discharges which obtained in the European hospital were in force here also. Disinfection of the clothing, both of those who died and of those who recovered, were carried out as far as practicable.

The dead were removed by the friends for interment or cremation according to the religious creed of deceased.

It may not be out of place, before leaving this part of the report, to state that all the native servants, with the exception of two extra hands who bolted in fright at the first death among the Europeans, behaved exceedingly well, and that they were rewarded according to their respective merits at the end of the epidemic.

Symptoms and Treatment.

These will not detain me long, as I have nothing new to offer under either of these headings.

I have beside me full details of every case treated, but for the reason alleged I shall not burden my report with them.

I may, however, just glance at the general line of treatment followed. Opium was used only in the stage of premonitory diarrhoea, and was entirely omitted when the disease was seen to be fairly established. To relieve the nausea and vomiting, carminatives and stimulants were given—aromatic spirits of ammonia, tincture of ginger, chloric ether, &c., with sinapisms to the epigastrium. The distressing cramps were relieved by smartly rubbing the limbs affected with turpentine liniment and by shampooing. To alleviate the intense thirst, water, plain or in effervescence, was allowed *ad libitum*—fortified, when collapse began to set in, with occasional small quantities of brandy or champagne. During the period of collapse over-stimulation was most carefully guarded against, in view of the hoped for period of re-action. The declining warmth of the body was supported by hot bottles wrapped in blankets and applied where deemed necessary. No special means were adopted to restore the renal functions, my opinion being that re-establishment of the urinary secretum cannot be forced on by diuretics, but that the resumption by the kidneys of their special duty depends upon and form an integral part (symptom) of the condition of general convalescence, as the patient's frame succeeds in shaking off the specific effects produced by the action of the cholera poison. In the two cases which recovered, suppression of urine lasted thirty-two and forty-three hours, respectively.

The disease, as had been remarked in the early part of the century, was milder among the Natives than among the Europeans, the deaths among the latter being 66·6 per cent. of cases, and among the former only 45·8 per cent. It may be noted that nearly all the natives attacked were subject to worms—lunbrici—which they passed by stool and vomit.

General Remarks.

In the general remarks which I am about to offer in connexion with the epidemic, I shall confine myself strictly to such facts regarding the origin and dissemination of the disease in the battery as I can personally vouch for. I have no pet theory either to advance or to support, and consequently I find myself under no temptation to indulge in a deductive method of reasoning, and endeavour to make the facts I have collected fit into or favor any particular speculative doctrine. I believe that air, food, or water, contaminated with choleraic discharges, are all efficient means (the two latter more effective than the first) of introducing the specific poison of cholera into the human economy; and if I incline to the opinion that in the particular instance under review the agent of dissemination was air, that is personal communication, I shall state fully my reasons for being led to entertain such an opinion.

1. It has been shown that cholera approaches the cantonment either from the north, that is from the direction of Mandalay, or from the south, the direction of the Mya-noung District. I have also stated my belief in the endemicity of the disease in these parts of the river valley.

(1)—Directions from which cholera approaches the cantonment.

2. The cantonment, as already pointed out, is situated on the river Irrawaddy, the great highway of Burmese commerce, along which eleven-twelfths of the trade with Upper Burmah is conducted, the remaining fraction being carried up country by way of Tonghoo, another frontier military station situated on the Sitang river to the east of Thayetmyo (see map). On an average 12,000 trading boats of various tonnage annually pass the Custom House at Allan-myoo proceeding down the river, while a corresponding number proceeds upwards. Besides these native boats, mail steamers ply weekly between Rangoon and Mandalay, calling at the numerous towns and trading ports planted along the banks of the river, on all which occasions they embark and disembark considerable numbers of passengers. Nor must we overlook the multitudinous small craft employed as ferry boats, or engaged in carrying on local commerce between the less important towns and villages; for these constitute an important chain of intercommunication composed of almost innumerable links, which serve to unite the whole course of the river from Rangoon to Bhamo. To attempt to place

(2)—The Irrawaddy, the great highway of Burmese commerce.

quarantine restrictions on commerce within British territory on the threatened invasion of an epidemic would have the effect of throwing the whole country into confusion, and probably result in serious disturbances. Nor do I believe that such a restriction, even if effectually carried out, would be ultimately successful in preventing the importation of the disease. Vagrant Burmans from beyond the frontier on one side and from Mya-noung and Henzedah on the other would continue to find their way into the cantonment or its neighbourhood by means of the numerous foot-paths which intersect the jungle in every direction even in its densest parts.

Question of quarantine restrictions.

3. So long, then, as the disease remains endemic at other points within the valley of the Irrawaddy, and continues subject to periodical outbursts of activity, while at the same time uninterrupted communication is (necessarily) permitted between the station and the centres of infection, so long must we expect to find the troops quartered here visited with recurrent epidemics of cholera. There can be no doubt that the disease, if not actually endemic in the cantonment and neighbourhood (which there is no evidence to prove, former epidemics having been preceded by outbreaks elsewhere), at least when imported finds in this quarter local conditions favorable to its reception and development. As to what these conditions are we must confess our entire ignorance, and admit also that if we did succeed in discovering them it would still be a question to what extent, if any, we should be able to counteract their influence. Though unable to beat back the invader in his insidious assault, we may yet do much by attention to hygienic measures to weaken his power for mischief when he has effected a lodgment. But we must not credit sanitation with greater power than it possesses. It will accomplish a good deal, but it is not omnipotent. In spite of all the efforts of sanitary science, as these efforts are directed by our present acquaintance with the nature of the essential morbid principles of cholera, it seems only too probable that the pestilence will continue to carry off its periodical tale of victims in the future as it has done in the past; and that this woeful cycle of death will go on recurring till the mystery of the causation of cholera has been successfully solved, or, what seems even more likely, till the disease has worn itself out like the plagues of the middle ages, and been succeeded by another malady equally destructive to the human race.

(3)—The station will probably continue liable to periodical visitations of cholera.

4. From the evidence adduced in the beginning of this report, I believe myself justified in ascribing the propagation of the epidemic from its original seat of outbreak to the agency of personal transport. Dr. Bryden's theory as to dissemination of the disease germ by wind will not hold good in this instance. The presence of moisture he considers to be an indispensable element for the efficiency of the wind as a propagator of the cholera contagion; but the wind which blows up this river valley in March and April is not a moist but a dry wind. Again if the wind were really the agent of dissemination, how came it that the disease was present in the 45th Regiment alone during the months of April and May, while the native town and jail, which lay to wind-ward of the infected corps, and the Royal Artillery and the Syces' lines which lay to leeward, all escaped the influence of the poison-charged breeze?

5. I have been unable to trace the immediate importation of the disease into the Syces' lines. (4)—The epidemic propagated from seat of outbreak by personal transport. As already pointed out, the official register of deaths for the district does not record any fatal cases of cholera as having taken place in the month of June; but I consider that this circumstance, for reasons stated elsewhere, by no means affords satisfactory evidence as to the non-existence of the disease among the Burmese population.

6. The first appearance of the disease among the native followers of the battery occurred on the 19th June, when two children were attacked. From inquiries made on the spot at the time I satisfied myself that these cases were really the first instances of the disease which had been seen in the village. On the 24th two more children were attacked, and it is a point worthy of remark that out of the twenty-four cases of cholera admitted from this village no less than seventeen, or 70 per cent., were children between the ages of 12 and 3.

7. On the 25th a Burman employed as a servant by the head man of the Syces' village was seized with cholera and died before he could be removed to hospital. (His master was severely reprimanded for his culpable negligence in not reporting the circumstance sooner.) I made an inquiry into the case, but it was impossible to arrive at a decision whether the man had contracted the disease in the Syces' lines or in one of the neighbouring villages which he was in the habit of frequenting. This circumstance naturally tends to direct attention to the probability of the seeds of the epidemic having been originally introduced into the lines by outsiders like the Burman alluded to; but to permit this assumption to lead one away from other points of inquiry would be a mistake, and likely to result only in defeat of the object sought to be attained. There seems rather every reason to believe that the disease was primarily imported by certain of the native followers themselves.

8. During the month of June (and for several months previously) it was the custom of the grass-cutters to cross the river to Allammyoo and Yua-doung, and even to proceed as far down the stream as Kama in search of grass, which is very scarce in this neighbourhood during the hot weather and till the rains have well set in. In these expeditions the women frequently carried their children along with them. Now although cholera was not officially reported to be present in the surrounding district, I am inclined to believe that the rumours which were prevalent about that period among the natives themselves as to the continued existence of the disease in the villages along the river's bank were, in this instance, correct; and consequently I infer that the children who furnished the first cases of the disease in the Syces' lines had caught the infection either immediately from having themselves been carried into an infected quarter, or immediately through their mothers who had returned home from pursuing their calling in such a locality.

9. As remarkable instances of exemption from the contagion of cholera under circumstances of importation of the disease or of close inter-communication with infected localities, I may mention the following facts:—

a.—It will be recollected that persons suffering from cholera were introduced into the native town on the 15th and 19th March, and into the jail (passing through the town) on the 12th April. Yet no cases occurred in the town or jail till the very end of June, when cholera appeared in both places almost simultaneously. The question of the cholera germ not meeting at this period of importation with soil favorable for its reception and reproduction is one which I gladly leave for others to discuss.

b.—The cooly village, where the disease broke out in the epidemics of 1869 and 1870, is now much diminished in size, and contains only about thirty inhabitants. It is approached by a path leading through the syces' lines, from which it is separated by a shallow nullah about twenty yards wide. This year no cases of cholera occurred in the cooly village, though the disease was rife in the neighbouring lines, while in the epidemic of 1869 matters were exactly reversed ; several cases occurred in the cooly village, but none in the syces' lines.

c.—The village of Tsa-Eing, commonly known as Shye-bustie, furnished, as already stated, eleven deaths from cholera between the 7th and 11th of July. It is separated from the dhoby village, which has about an equal population by the mouth of a nullah (see plan of cantonment), the distance between the two villages, however, not being so great as that represented in the sketch, for the houses of the respective communities almost touch each other in the bed of the nullah. The inhabitants of Tsa-Eing must pass through the dhoby village to reach the cantonment or the large bazaar. Though there is thus the closest intercourse between the two localities, not a case of cholera was reported in the dhoby village ; and I am inclined to believe the place enjoyed a substantial immunity from the disease, because when the battery followers were encamped near it, the inhabitants protested to the station authorities against the undesirable proximity of an infected body of individuals. The dhoby village occupies a higher site on the river bank than Shye-bustie, which lies very low.

d.—One case of cholera occurred in the Sudder bazaar, imported in the premonitory stage from a neighbouring village. The disease did not spread, and it is stated, as a remarkable fact, that the bazaar, with a population of about 1,100, has enjoyed complete immunity from previous epidemics which have prevailed in and around the station. It is situated near the western limits of the cantonment, and occupies ground having a slight slope to the east.

e.—The 1st Madras Native Infantry had only one case of the disease, though the men of the regiment were constantly engaged in passing and re-passing through the infected lines of the European troops, and had free access to the large bazaar while cholera was prevalent there.

I can suggest no explanation to account for these instances of freedom from epidemic influence.

10. There seems to me no question as to the men of the battery having contracted the disease from the native followers, with whom they were brought into daily contact at stables. All the men attacked were, with one exception, to be noticed presently, thus employed on stable duty at and prior to the date of seizure.

Driver McGinness, at the time of his attack, was line orderly, the duties of which office consist in seeing that the horse-keepers are all present and at their work morning and evening. A post of this description necessarily throws the owner of it into close connexion with the individuals whom it is his duty to superintend.

Bombardier Burley was battery orderly at the time of his attack. He conducted Gunner Hartnell to hospital on the evening of the 24th and Driver McGinness on the morning on the 25th, having, during the night, occupied a bed next the latter.

Gunner Bowles is the exception above alluded to. This man's sole duty lay in looking after the coffee-shop. Here he had employed under him a native cook who resided in the syces' lines ; and it is worthy of record that the cook's sister was subsequently brought to hospital with an attack of cholera—on the 17th July. This event took place six days after Gunner Bowles' case certainly ; but still the circumstance may be held to warrant the inference that the man had been living in a cholera-tainted atmosphere, which he left to take up his duties beside Gunner Bowles.

Of course all the men at stables were equally exposed to the risk of contagion, though only those were affected who happened to be at the time susceptible to the influence of the poison, whatever that unknown condition of the human economy may be, which tends to the receptivity of the cholera miasm.

In trying to trace the source of infection in the case of the first child admitted, the boy's father (Farrier Serjeant Huggins) informed me that he employed as cook in his family a woman who lived in the syces' lines. May it not then be presumed, with every semblance of probability, that this woman, though

Case of boy Huggins, probable source of infection.

to all appearance healthy herself, was the means of conveying the seeds of the disease to a weakly ailing child, unhappily susceptible at the time of receiving and developing the poison?

With regard to the probable source of infection in the three cases (two children and a married gunner) which occurred in the married quarters, I have the following observations to offer. It is the custom of the persons occupying the family quarters to co-operate in the employment of native servants to act as cooks for them; and during the month of July there were thus employed three women and a girl, all of whom live in the infected lines.

Now the boy Germain was frequently in the cook-house engaged in preparing tea, &c., for his mother, who was at that time ill and confined to bed. The child Bedford was an infant in arms, and consequently carried into the cook-house whenever its mother had occasion to go there. Gunner Lyons, the last victim to the epidemic (attacked five days after the disappearance of the disease from the camp of the followers), who also lived in the married quarters, was constantly in the habit of visiting the cook-house for the purpose of preparing food for himself and family, his wife being then in a delicate condition, and he, like a good husband, taking upon himself the part of saving her every avoidable fatigue or exertion.

Boy Germain.

Child Bedford.

Gunner Lyons.

Of course it is open to speculate on the possibility of the poison being conveyed in the food, and I am not prepared to assert absolutely that such was not the case; but my own opinion is that had the disease germ been introduced by the food, the epidemic would have been more general than it was.

11. While the above-mentioned cases seem to me fairly well authenticated instances of infection arising from personal communication, the fact must not be overlooked that other families—those of non-commissioned officers living in separate quarters—which were similarly provided with native servants from the syces' line, furnished not a single instance of choleraic infection, even though, in the case of these families, the servants were entrusted not only with the work of cooking, but also with the duty of looking after the children.

(11)—Exemption of other families similarly provided with native servants.

12. But the two hospitals (European and Native) afford the most remarkable illustrations of immunity from infection by personal communication: no attendant or official connected with either having contracted the disease, or even having shown symptoms, with the sole exception of the Hospital Serjeant, of an effort on the part of the system to throw off the influence of the disease. A still more noteworthy instance of exemption is to be found in the fact that the friends and relatives of the native sick, many of them women with children in arms, remained day and night enveloped in the poison-laden atmosphere of a crowded cholera ward, and yet all escaped without having furnished in their own persons or in those of their infants a single case of the disease. Of course disinfectants were freely used, and every means of ventilation rendered available to the fullest possible extent, while overcrowding was kept down as far as possible by the removal of convalescents into the outer verandah; yet there can be no doubt that the air inside the native hospital was largely impregnated with the poisonous germs of cholera.

(12)—No instance of infection in any one connected with the hospitals.

Nor among the friends and relatives of the native patients.

There were very few instances among the natives of two members of the same family having been attacked during the epidemic.

General Health of the Battery before, during, and after the Epidemic.

13. The general health of the men previous to the epidemic was good, there being very few cases of diarrhoea or dysentery, and none at all of fever. The health of the native followers was also good, but after the outbreak there seemed to be among all classes a considerable increase of diarrhoeal complaints as will presently be noticed.

(13)—General health before the outbreak good.

14. The subjoined table will show at a glance the admissions into hospital from diarrhoea and dysentery, or fever, for the last six months of the present year, and, for the purpose of comparison, those of the corresponding months of the two previous years are added:—

(14)—Admissions from diarrhoea and dysentery or fever, March to August 1871, 72, and 73.

Months.	1871.		1872.		1873.	
	Diarrhoea and Dysentery.	Fever.	Diarrhoea and Dysentery.	Fever.	Diarrhoea and Dysentery.	Fever.
March	6	...	...	...	2	...
April	2	4	...	...	...	...
May	3	1	1	1	...	1
June	3	2	1	4	1	1
July	2	3	...	2	1	...
August	1	2	...	...	2	1
Total ...	17	12	2	7	6	3

15. Although the admissions from diarrhoeal complaints were very few, the applications at hospital on account of looseness of the bowels during the time the epidemic (15)—Great increase of diarrhoeal complaints during the epidemic. lasted underwent a great increase, compared with the corresponding periods of the last two years. In June mostly after the outbreak, there were among the men alone 41 applications for astringent medicine, compared with ten of the past year, and six of the year before ; and in July there were 86 such applications, compared with seven and fourteen of the two previous years. The women, children, and native followers furnished a similarly proportionate increase of cases of diarrhoea. But it must not be forgotten that the augmentation of cases was partly real and partly apparent, by which expression I mean that, while there can be no question as to the greater frequency of intestinal derangements during the epidemic period of the present year than at the corresponding periods of the last two years, still we ought to bear in mind that many slight cases of diarrhoea were this year reported at hospital by the stringency of the order on the subject, which in other non-epidemic years would never have been brought under observation at all.

16. The cases of diarrhoea treated in August were but little over the nominal average. The admissions into hospital for other complaints during the months of June, (16)—Admissions for other complaints in June, July, and August. July, and August were somewhat in excess of the same months last year, but fewer than those of the year before.

Duration of Premonitory Diarrhoea with notice of General Health and Habits of those attacked.

17. 1st case.—Gunner Hartnell (age 29), admitted at 7 P.M., stated that he had suffered from diarrhoea since 5 A.M. Choleraic discharges came on at 9 P.M. Duration of (17)—In 1st case. premonitory stage=sixteen hours. In general good health at the time of attack. I had invalided this man last year for hydrocele, but he was sent back from Rangoon for further treatment. About a month before his admission from cholera, I had tapped him the second time since his return, and on this occasion with every prospect of success. He had left hospital a fortnight before being seized with cholera, and had quite recovered from the effects of the operation. Five years in India. Total service seven years.

18. 2nd case.—Driver McGinness (age 28), admitted at 6 A.M., stated that he had been seized with diarrhoea at midnight. Choleraic discharges made their appearance (18)—In 2nd case. directly after admission. Duration of premonitory stage=six hours. In good health at the time of attack, but was a weakly man. He was invalided to Poonamallee last year, and had rejoined the battery in February last. Nine years in India. Total service ten years.

19. 3rd case.—Bombardier Burley (age 39), admitted at 6 A.M. 25th June. On admission (19)—In 3rd case. stated that he had been seized with diarrhoea at 5 A.M. 25th June. Since his recovery has informed me that he ought to have said 3 A.M., at the same time adding that he had had slight diarrhoea even the day before. Choleraic discharges did not come on till 2 A.M. on the 27th, therefore stage of premonitory diarrhoea lasted forty-seven hours, if not longer. This man was in good robust health at the time of seizure. Eleven and a half years in India. Total service fifteen years.

20. 4th case.—Boy Huggins (aged six years), admitted 6 A.M., had gone to bed in usual health. Suddenly seized at 5 A.M. with pressing diarrhoea, which sent him to stool (20)—In 4th case. two or three times in rapid succession. True choleraic discharges supervened at 6 P.M. Duration of premonitory diarrhoea=thirteen hours. A weakly ailing child, but seldom requiring medical treatment. Of Eurasian origin by both parents.

21. 5th case.—Boy Germain (aged 12) admitted at 4 P.M. Felt ill at dinner time (1 P.M.), but had been in usual health in early part of the day. Attacked at 3-30 P.M. (21)—In 5th case. with diarrhœa, which assumed a choleraic character at 6 P.M. Stage of premonitory diarrhœa lasted two and a half hours. In good health at the time of seizure, but was a boy of delicate constitution. Two and a half years in India.

22. 6th case.—Child Bedford (female, aged $1\frac{1}{2}$ years), admitted at 4 P.M. Diarrhœa said to have come on at 2-30 P.M. Assumed choleraic type at 6 P.M. This stage, (22)—In 6th case. therefore, lasted three and a half hours. It would be difficult, however, to state exactly when the premonitory stage came on in this case, as the child was the subject of chronic diarrhœa, and had been so, owing to bad nursing, for the last four months. General health bad. Of Eurasian parentage by mother.

23. 7th case.—Gunner Bowles (aged 34), admitted at 11 P.M. Had been the subject of pressing diarrhœa which made him run to the rear three or four times in (23)—In 7th case. quick succession between 8 and 9 P.M. Choleraic discharges on admission. Premonitory stage, therefore, lasted three hours. Had lately been in indifferent health, suffering frequently from diarrhœa and dyspepsia. Thirteen years in India. Total service fourteen years.

24. 8th case.—Driver Raven (age 20), admitted at 5 P.M., stated at the time of admission that he had been ill with diarrhœa since noon. Since his recovery he has (24)—In 8th case. informed me, as did Bombardier Burley, that he had been the subject of slight diarrhœa even the day before. Choleraic discharges at 10 P.M. Premonitory stage, therefore, nine hours at least. This man was a recruit nine months out from England, and in robust health at the time of seizure. Service two years.

25. 9th case.—Gunner Lyons (age 36), admitted at noon. Compelled to run sharp to the rear at 4 A.M. Had been purged twice since that hour up to time of admis- (25)—In 9th case. sion. Choleraic symptoms came on at 2 P.M. Premonitory stage, ten hours. This man was an old soldier in good general health at the time of his attack, but was the subject of hypertrophy of the heart, for which I had invalided him last year, expecting him to be sent to England and discharged the service on a pension to which he was entitled. He was returned to do duty with the battery, but was found quite unfit for efficient work, and since rejoining he had been employed on some light and easy duty only, hanging on till the return of the invaliding season should afford me a second opportunity of doing justice both to the man himself and to the service. Sixteen years in India. Total service eighteen and a half years.

All these men were soldiers of steady, temperate habits—temperate, not merely in the regimental sense of the word, which denotes that a man contrives to keep out of the orderly room, though probably all the while quite a toper, but (All the men attacked of temperate, steady habits. they were men whose good behaviour and exemplary conduct were recognized and acknowledged both by their comrades and their officers.

From the foregoing remarks it will be seen—
Summary of facts^s contained in foregoing cases. That premonitory diarrhœa, varying in duration from two or three hours to two or three days, was present in every instance of the disease.

That the healthy and robust were attacked equally with the feeble and weakly, and the recruit with the old soldier

That the men of steady habits fell victims to the disease while the intemperate escaped entirely; and also

That of the six men attacked and four who died, three had been invalided from the station during the past twelve months.

26. Water-supply.—I think the origin and propagation of the disease in the battery has been (26)—Water-supply. sufficiently accounted for without assuming the drinking water to have been the source of the evil; but, as it is my desire to afford information on all the points which constitute the subjects of investigation on the occasion of an outbreak of cholera in a corps, I shall address myself to the question of the water-supply.

Drinking water for the battery is obtained from a single well situated at the distance of about eighty yards from the nearest barrack (No. 3). It is sunk in the gravel, and has its sides lined with thick masonry. Its mouth is protected by a masonry parapet, which is encircled for a breadth of several feet by a chunamed platform. The water has been analyzed and found very good—only a little hard from the presence of lime. At this season of the year there is a depth of twenty-five feet to the surface of the water, which is drawn up by the usual native arrangement of leathern bag, rope, and pulley. The water is emptied directly into a barrel cart, and conveyed to the barracks, to be there made available for

drinking purposes by means of the customary defective arrangement of chatties. The well is at too great a distance from the barracks to be likely to undergo fouling from them, but it occupies low ground, and there is a good deal of soakage round it during the rainy season. It is not much used by outsiders, as it does not lie on any great thoroughfare; but there is an internal source of danger quite as great or even greater which I must not fail to notice.

27. The position of the well is marked on the plan of the Royal Artillery lines (near the canteen), and it will be seen that it is in far too close proximity to the native hospital. (27)—Well into close proximity to native hospital. This during cholera times is a real source of danger which cannot be overlooked, and must not be ignored. If the attendants on cholera patients were to draw water with vessels which had been used by these patients, or to wash tainted cloths near the mouth of the well, there is a fearful probability of the specific poison of the disease being communicated to the water; and it requires very little acquaintance with the etiology of cholera to predict the disastrous consequences which would ensue if the material cause of the disease were to find its way into the drinking water supplied to a body of men.

During the present epidemic all temptation to make use of the well was removed from the friends of the sick by the liberal supply of water with which they were kept constantly provided by the hospital bheesties; and every one in attendance on the sick was strictly warned against approaching either the barrack or the hospital well on any plea whatever, under a threat of prompt and condign chastisement in event of any infringement of the order being discovered. Still, considering the propensity shown by all classes of natives to disobey orders, should they hope to elude detection, and should such disobedience accord in the smallest degree with their natural lazy and filthy habits, it will be seen that in this proximity of the water-supply to a native hospital there lies at all times a source of imminent danger.

28. One of two things ought to be done to remedy this hazardous state of matters. Either (28)—The risk involved in the hazardous proximity of the native hospital to the water-supply ought to be obviated. another well for supplying the battery ought to be dug in a less objectionable quarter, or the native hospital should be removed from its present position. If neither of these measures is likely to be adopted on account of the expense to Government, then at least the present well ought to be covered in and fitted with a force-pump protected by lock and key, and thus rendered accessible only to those employed in drawing water for the battery.

29.—The patients in hospital, the subordinate establishment, and the native servants are all supplied with drinking water from a well situated in the hospital compound. (29)—Hospital well. of much the same depth as the last, allowing for the difference in level of the site. From this well, too, a large number of officers living in the neighbourhood obtain their supply of drinking and bathing water.

30.—The residents in the Syces' lines draw their water from a well which was dug only eight months ago. It also is formed in the gravelly soil, and its mouth is protected with a masonry parapet and platform above described. That the presence of the epidemic among the native followers was not due to contamination of the water may reasonably be assumed as a fact when we find that the disease quickly disappeared on the evacuation of the village, though its late residents continued to drink from the same well as formerly. (30)—Well for supply of Syces' lines. Epidemic amongst native followers not due to drinking water.

31. *Rations*.—Having discussed the subject of the drinking water I may next briefly touch on that of the food of the men—with reference to its quality. The remarks made by Dr. Thomson, 76th Regiment, in his report on the epidemic of 1869 still continue to hold good. There is too little variety in the men's rations. A diet of beef of only "fair" quality (it can never aspire to a higher designation) day after day throughout the year is not calculated to keep a man's digestive apparatus in full healthy vigor, and as a matter of fact dyspeptic complaints are very common. (31)—Rations.

32. The men in barracks get mutton on Christmas and New Year's day, while patients in hospital are indulged in the luxury every alternate day, if on half or full diet. (32)—Mutton issued only on Christmas and New Year's day to men at duty; issued every alternate day to hospital. It ought perhaps to be added in explanation that sheep farming here on a sufficient scale to supply all the troops has proved a failure, the soil or climate, or both, being found inimical to the rearing of sheep.

33. Milk and butter were supplied to the single men and married families by a contractor living in the neighbourhood of the Syces' lines. These articles were furnished to the hospital by a resident in the Commissariat lines. (33)—Milk and butter whence supplied.

34. Extra articles of diet desired by the married families had to be procured from the large bazaar in the native town, but were in some instances purchased of persons hawking their goods from door to door.

(34)—Extra articles of diet whence procured.

(35)—Cooks who prepared the food of the single men where resident.

35. I have already alluded to the cooks employed by the married families; those also engaged in preparing the food of the single men lived mostly in the Syces' lines.

36. Soil.—The cantonment stands on alluvial soil, composed chiefly of coarse sands and gravels, which extend downward to a considerable depth, far below the water level. Beneath this superficial covering are found argillaceous compounds—sils, shales, &c., and deeper still lie strata of sandstone rock; the whole resting on a basis of nummulitic limestone, which crops up to form a considerable eminence—a single peak in a low range of hills—at a distance of about four miles from the cantonment. In many places the surface of the ground is covered with a layer of dark loam formed in part of vegetable mould, but consisting chiefly of mud, deposited at a period when the river flowed at a higher level and over a wider extent of the valley than it does at present. The ground occupied by the European lines is partially sheltered with trees, while the station itself is enclosed on every side, except riverward, with thick jungle.

(36)—Cantonment stands on alluvial soil.

Meteorology.—It is not my intention to encumber this report with deprecated “yards of meteorological tables,” though one or two statistical returns under the head of rainfall will be necessary for the information of those who desire to be furnished with data respecting a natural phenomenon which is so widely believed to have an intimate connexion with the production and diffusion of the devastating ezymotic, whose history among the persons committed to my charge is under review.

Meteorology.

37. Temperature.—An appalling array of tables which record the thermometrical observations taken at this station during the last five years I shall condense into the simple statement that, having carefully compared these returns *per menses et per annos*, I find very little divergence in any one given month or year from the general average. I may add more particularly that during the recent epidemic months there was no protracted duration of an unusually high degree of temperature, nor the occurrence of any abnormal degree of low temperature—nothing in short to be discovered in the movements of the thermometer, as far as my poor knowledge serves, which could account for the presence of a disease so little controllable by the extreme cold or heat, as to select its victims from amid the snows of Sub-Artic Russia as well as from the burning plains of tropical India. With regard to the feeling of oppressiveness in the atmosphere which is sometimes alleged to exist where cholera is epidemic, there was nothing of that sort complained of here—rather the general impression in the station was that the hot weather and rains of this year were less “trying” than the same seasons were last year.

(38)—Wind much the same as in previous years.

38. Wind.—The general direction and strength of the wind before and during the epidemic were much the same as they have been in by-gone years.

39.—Rainfall.—I shall enter into greater detail on this division of the meteorological phenomena, because I am aware that rain is believed both popularly and by high authorities to play an important part in bringing into activity the dormant germ of the cholera virus—an opinion of respectable antiquity, having been entertained as far back at least as the outbreak in Bengal of 1871 (I wish it to be understood that I have used the word germ throughout this report merely to express the first principle of the disease, and not to imply a belief on my part that the essential cause of cholera is possessed of any vitality whatever, either animal or vegetable). I shall also take the opportunity of making a passing allusion to the fact of the rainfall as they bear on Pettenkoffer's theory, though, of course, I am excluded on the present occasion, by the nature of the duty before me, from discussing that or any other speculative doctrine.

39—Rainfall.

40. During the month of March, while the epidemic was travelling up-country from its original focus above the head of the delta, there was no rain, as far as I have been able to ascertain, in any part of the valley. Yet the disease advanced steadily upwards.

(40)—No rain during the month of March.

41. In the month of April cholera broke out in the 45th Regiment, and this single month furnished thirteen out of the total of twenty-three cases which occurred in the regiment during the epidemic period extending over April, May, June, July, and August (1st day only). There was very little rainfall during this month, only two cents on the 20th and eighteen on the 28th: This occurrence of cases coincides to a certain

(41)—Rainfall in April, and number of cases of cholera.

extent with these humid days. The first case in the regiment took place on the 12th and the second on the 20th. Several more cases occurred during the intervening days up to the 28th, when there were no less than four seizures, the largest number which took place in the corps on any single day. Two (2) more cases occurred on the 29th. Towards the end of the month there was, apart from the fall of rain, a certain amount of humidity in the atmosphere, which was occasionally loaded with heavy black clouds, whose presence seemed to betoken the advent of the coming monsoons.

42. May.—On the 1st 72 cents of rain fell, on 13th 18 cents, on the 30th 2·20 inches, and on the 31st 2·06 inches. It will thus be seen that the rains did not really set in till the very end of the month, whereas the usual time for the bursting of the monsoon in this part of the world is the first and second week in May.

There were only two cases of cholera (45th Regiment) this month, and they occurred on the 12th and 30th.

43. June and July.—As the epidemic extended its influence in the month of June to bodies of men and communities previously intact, and raged at its fiercest in the month of July, I think it better to give tables showing the rainfall and cases of cholera side by side for the purpose of facilitating the work of the theorist in making such deductions as the facts may seem to warrant.

Table showing Rainfall and Cases of Cholera in Cantonments and Native Town during the Months of June and July.

Date.	June.				Date.	July.			
	Rainfall.	Cases of Cholera.				Rainfall.	Cases of Cholera.		
	Inches.	Europeans.	Natives.	Total.		Inches.	Europeans.	Natives.	Total.
1	1·11	1	...	1	1	...	...	...	...
2	·14	..	...	...	2	·06	...	5	5
3	...	...	...	...	3	·49	...	3	3
4	·22	...	...	...	4	...	...	4	4
5	·10	...	...	...	5	...	...	3	3
6	...	1	...	1	6	...	...	5	5
7	...	...	...	...	7	...	1	3	4
8	...	...	...	...	8	·21	3	2	5
9	...	...	...	...	9	·23	...	9	9
10	...	...	...	...	10	...	...	5	5
11	·30	...	...	...	11	·04	1	2	3
12	·70	...	...	...	12	...	...	1	1
13	1·84	...	...	...	13	·54	...	2	2
14	...	...	...	...	14	...	...	1	1
15	1·08	...	2	2	15	...	...	3	3
16	...	...	...	...	16	·18	...	...	...
17	·06	...	...	...	17	·54	...	2	2
18	·10	...	...	...	18	...	1	1	2
19	1·08	...	...	...	19	·36	...	1	1
20	·19	...	...	...	20	·05	...	1	1
21	·34	...	...	...	21	·52	...	2	2
22	...	...	...	...	22	·14	1	4	5
23	·03	...	...	...	23	·50	1	...	1
24	·20	1	2	3	24	·14	1	...	1
25	·24	2	2	4	25	·90	2	...	2
26	·05	...	...	...	26	1·24	...	...	...
27	...	...	...	...	27	·06	...	...	...
28	·14	...	1	1	28	1·16	...	...	...
29	·01	...	1	1	29	1·04	...	...	...
30	·16	...	...	...	30	·05	...	1	1
...	...	...	...	...	31	·01	...	...	...
...	8·05	5	8	13	...	8·69	11	60	71

NOTE.—Under the head "Europeans" are embraced cases occurring in the families of soldiers as well as among the men themselves. The term Natives includes all races except Europeans. The precise number of cases which occurred in the native town is not known, only the fatal cases are given.

44. The greater intensity of the disease during the month of July, after the rains had well set in, cannot fall to be noted. *Apropos* of the seasons at which cholera is believed most generally to manifest its power, I recollect a remark occurring in one of the series of papers "on cholera in insular positions" which have recently appeared in the *Lancet* from the pen of Inspector-General Smart, C.B., R. N., to the following effect: "The dry season is that of epidemic intensity, and the wet season that of dormancy or comparative freedom from activity," (I hope I do not detach the sentence from any contextual qualifica-

tion). It is not my desire to question the general correctness of this dictum, but the remark at the time of reading led me to consider how far it was applicable to the present epidemic. Here it certainly fails to establish its validity, as also it does in the case of cholera generally in this part of Burmah; for, as far as I can gather, the disease has in late years been more prevalent in this neighbourhood during the first half of the rains than at any other period of the year.

(45)—Amount of rainfall, monthly and annual, from 1869 up to present date.

45. In the following table is presented the monthly rainfall for the present year up to date, and for the full periods of the four years immediately preceding:—

Years.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total Inches.	Remarks.
1869 ...	...	...	...	...	4.2	6.7	5.4	5.9	2.6	6.30	...	...	31.1	Epidemic year.
1870 ...	...	0.3	...	0.5	12.3	6.3	7.8	5.7	6.1	2.6	...	...	41.7	Do.
1871 ...	...	...	...	0.2	8.4	7.7	9.6	10.7	12.0	5.3	0.7	...	54.6	
1872 ...	...	...	...	0.1	7.2	11.4	6.2	7.9	4.9	3.3	...	...	41.0	
1873 ...	...	...	...	0.2	5.2	8.7	8.7	5.6	5.4	up to 12th Sept.			33.2	Epidemic year.

46. It will be seen that the largest amount of rain which fell in the given quinquennial period was registered in the year 1871; consequently if it be true, as Pettenkoffer suggests, that cholera depends on the amount of moisture contained in the soil resulting from the rainfall, the epidemic ought to have selected, for the manifestation of its activity, that year of large rainfall (and also consequent great rise of the river), or, failing it, the early part of the year succeeding. Another suggestion of Pettenkoffer's, dependent, of course, on the principle above enunciated, is "that is the time when the ground water is sinking from an unusual height that we run the greatest danger from cholera if the seeds of the disease have fallen into the soil." Now if this axiom be true, its converse ought also to be true, and we should consequently expect the epidemic months to have been characterised by the subsidence of the subsoil water from an unusual height. But such was not the case. A well has been set apart in the cantonment for the purpose of recording the rise and fall of the subsoil water in connexion with the great German theory. The registers kept for the last two years are now lying before me; but I have to regret the absence of those for 1871—if indeed operations had been commenced in that year. In examining these records, I can discover but little difference between the general level of the subsoil water during the present year and that of the corresponding months of last year. The level at the commencement of the different months is much the same in both years, and the rate of subsidence equally gradual and moderate.

47. The final disappearance of the epidemic in the end of July [there was a solitary case (child) in the 45th Regiment on 1st August] was not marked by any noticeable change either in temperature, rainfall, strength, or direction of wind currents, or by any unusual electric disturbance. To account for the absence of any allusion to other meteorological observations, I may explain that the Royal Artillery Hospital is not provided with any instruments except a common barometer, the amount of rainfall even being borrowed from the Civil Hospital.

THAYETMYO,
20th September 1873.

(Signed) W. ROBERTSON, M.A., M.B.,
Surgeon, Royal Artillery.

APPENDIX III.

STATISTICAL TABLES.

EUROPEAN ARMY RETURNS.

I.

Table showing the Increase and Decrease among the British Troops serving in the Madras Presidency during the year 1873.

	Sappers and Miners. Artillery. Cavalry. Infantry. Total.					Sappers and Miners. Artillery. Cavalry. Infantry. Total.					Total Madras Army.
	Effectives.	Unattached.	Effectives.	Unattached.	Effectives.	Unattached.	Effectives.	Unattached.	Effectives.	Unattached.	
Strength, 1st January 1873	20	17	2,349	93	904	15	8,762	113	12,035	238	12,273
<i>Increase.</i>											
Recruited in India			23		5		13		41		
Drafted or transferred from England or Colonies	5	617	100	455	1,177						
Transfers received from corps in other Presidencies	1	82	33	129	245						
Joined from desertion		1	1	5	7						
Total Increase	6		723		139		602		1,470		1,470
	26	17	3,072	93	1,043	15	9,364	113	13,505	238	13,743
<i>Decrease.</i>											
Time-expired (pensioned.)		41	1	9	23	2	73	3			
Invalided { For discharge	1	126		47	240		413	1			
Invalided { For change of climate											
Volunteering for General Service											
Discharged by purchase		2		2	9		13				
Do. by Court-martial				4	3		7				
Do. otherwise	2	17		14	8		41				
Deserted		3			29		32				
Transferred to corps in other Presidencies	3	44		2	34	1	83	1			
Transferred from the Unattached List to the Warrant Grade on promotion			6			4		10			
Transferred on duty to England or Colonies											
Embarked for England		8		1	673	1	682	1			
Died	2	45	1	18	142	3	207	4			
Total Decrease	7	1	286	8	97		1,161	11	1,551	20	1,571
	*19	16	2,786	85	946	15	8,203	102	11,954	218	12,172
<i>Reversions.</i>											
Transferred from Effectives to Unattached List						24					
Remanded from Unattached List to Effectives						10					
Difference to add to Unattached List to deduct from Effectives	+2	-2	-12	+12	-2	+2	-2	+2	-14	+14	
Strength, 1st January 1874	21	14	2,774	97	944	17	8,201	104	11,940	232	12,172

* Includes eight men, 42nd Company Royal Engineers.

II.

Table showing the Increase and Decrease among the European Troops of the old Indian Forces not borne upon the Rolls of H. M.'s British Army.

						Sappers and Miners.	Artillery.	Cavalry.	Infantry.	Total.	Sappers and Miners.	Artillery.	Cavalry.	Infantry.	Total.	Total Madras Army.	
						Effectives.	Unattached.	Effectives.	Unattached.	Effectives.	Unattached.	Effectives.	Unattached.	Effectives.	Unattached.	Effectives.	Unattached.
Strength 1st, January 1873						...	1	1	2	...	...	...	5	1	8	9	
						Effectives.	Unattached.	Effectives.	Unattached.	Effectives.	Unattached.	Effectives.	Unattached.	Effectives.	Unattached.	Effectives.	Unattached.
Increase.																	
Recruited in India...						...		...		...		...		...		...	
Drafted or transferred from England or Colonies						...		...		...		...		...		...	
Transfers received from corps in the other Presidencies						...		...		...		...		...		...	
Joined from desertion						...		...		...		...		...		...	
Transfers received...						...	1	...	1	...	2	...		...		...	
Total Increase						...	1	...	...	...	1	...	...	...	2	...	2
						...	2	1	2	...	1	...	5	1	10	...	11
						Effectives.	Unattached.	Effectives.	Unattached.	Effectives.	Unattached.	Effectives.	Unattached.	Effectives.	Unattached.	Effectives.	Unattached.
Decrease.																	
Time-expired (pensioned)						...		...		...		...		...		...	
Invalided. { For discharge.						...		...		...		...		...		...	
Invalided. { For change of climate						...		...		...		...		...		...	
Volunteered for General Service						...		...		...		...		...		...	
Discharged by purchase						...		...		...		...		...		...	
Do. by Court-martial						...		...		...		...		...		...	
Do. otherwise						...		...		...		...		...		...	
Deserted						...		...		...		...		...		...	
Transferred to corps in other Presidencies						...		...		...		...		...		...	
Transferred from the Unattached List to the War-rant Grade on promotion.						...		...		...		...		...		...	
Transferred on duty to England or Colonies						...		...		...		...		...		...	
Embarked for England						...	1	...		...	1	...		...		...	
Died...						...		...		...		...		...		...	
Total Decrease						...	...	1	...	...	...	...	...	1	...	...	1
						...	...	...	...	...	...	...	...	...	...	...	...
Reversions.																	
Transferred from Effectives to Unattached List						...	...	...	...	...	...	...	...	...	...	...	...
Remanded from Unattached List to Effectives						...	...	...	...	...	...	...	...	...	...	...	...
Difference to add to Unattached List to deduct from Effectives...						...	...	...	...	...	...	...	...	...	...	...	...
Strength, 1st January 1874						...	2	...	2	...	1	...	5	...	10	...	10

III.

Return showing the Loss to Her Majesty's British Troops serving in the Madras Presidency by Deaths and Invaliding during the year 1873.

Diseases.	Died in and out of Hospital.*	Ratio of Deaths per 1,000 of Strength.	Diseases.	Invalided for Change of Climaté.				Invalided for Discharge from the Service.				Total Invalided.	Ratio of Invalided per 1,000 of Strength from Medical Returns.		
				Artillery.	Cavalry.	Infantry.	Total.	Artillery.	Cavalry.	Infantry.	Total.		For change of Climate.	For Discharge from the Service.	Total.
Small-pox ...	1	0.08	Ague ...	6	...	2	8	...	...	...	...	8	0.70	...	0
Typhoid Fever ...	10	0.87	Rheumatism ...	5	1	19	25	1	...	6	7	32	2.20	0.62	2
Intermittent do. ...	3	0.26	Scrofula ...	1	...	...	1	1	...	1	2	3	0.08	0.18	0
Cholera ...	4	0.35	Phthisis Pulmonalis ...	6	4	33	43	10	3	27	40	83	3.79	3.52	7
Phthisis Pulmonalis ...	12	1.05	Secondary Syphilis ...	16	7	18	31	3	...	6	9	40	2.73	0.79	3
Scrofula ...	11	0.96	Diabetes ...	...	...	1	1	...	...	...	...	1	0.08	...	0
Cancer ...	1	0.08	Dementia ...	...	1	1	2	...	1	1	2	4	0.17	0.17	0
Acute Miliary Tuberculosis ...	1	0.08	Sciatica ...	...	...	...	...	...	...	1	1	1	...	0.08	0
Stroke ...	7	0.61	Spinal Meningitis ...	...	...	1	1	...	...	...	...	1	0.08	...	0
Poplery ...	2	0.17	Nueralgia ...	1	...	4	5	...	...	1	1	6	0.44	0.08	0
Do. Congestive ...	1	0.08	Paralysis ...	...	1	3	4	...	...	1	1	5	0.35	0.08	0
Do. Sanguineous ...	1	0.08	Mania ...	...	...	...	...	...	...	3	3	3	...	0.26	0
Abscess of Brain ...	1	0.08	Paraplegia ...	...	...	1	1	...	...	...	...	1	0.08	...	0
Encephalitis ...	1	0.08	Hypochondriasis ...	...	...	...	...	...	...	1	1	1	...	0.08	0
Aneurism of Aorta ...	9	0.79	Sunstroke ...	...	...	3	3	...	...	...	...	3	0.26	...	0
Do. of Thorax ...	2	0.17	Epilepsy ...	...	...	...	...	1	2	7	10	10	...	0.88	0
Do. Abdl. Aorta ...	5	0.43	Ch. Encephalitis ...	...	...	1	1	...	...	...	...	1	0.08	...	0
Do. of Left Common Iliac ...	1	0.08	Hemiplegia ...	...	...	1	1	...	...	...	...	1	0.08	...	0
Do. of Arch Aorta ...	1	0.08	Impaired Vision ...	...	2	...	2	1	...	...	...	1	0.17	0.08	0
Stenosis of Coronary Aorta ...	1	0.08	Amaurosis ...	...	...	...	...	...	...	...	...	1	...	0.08	0
Hypertrophy of Heart ...	1	0.08	Retinitis ...	1	...	...	1	...	...	...	...	1	0.08	...	0
Valvular Disease of Heart ...	5	0.43	Cataract ...	...	...	1	1	...	...	...	...	1	0.08	...	0
Bronchitis ...	1	0.08	Deafness ...	1	...	...	1	...	...	2	2	3	0.08	0.17	0
Abscess of Lung ...	3	0.26	Pericarditis ...	...	1	...	1	...	...	...	...	1	0.08	...	0
Pneumonia ...	1	0.08	Palpitation ...	1	2	24	27	...	...	2	2	29	2.38	0.17	2
Ch. Pneumonic Phthisis ...	32	2.802	Hypertrophy of Heart ...	1	1	7	9	1	1	3	5	14	0.79	0.44	1
Dysentery ...	2	0.17	Varicose Veins ...	...	...	1	1	...	...	3	3	4	0.08	0.26	0
Diarrhoea ...	50	4.38	Valve Disease of Heart ...	1	1	8	10	2	3	6	11	21	0.88	0.97	1
Abscess of Liver ...	2	0.17	Aneurism of Abdl. Aorta ...	...	...	2	2	1	...	1	2	4	0.17	0.17	0
Rheumatism of do. ...	2	0.17	Fatty Degeneration of Heart ...	1	...	...	1	...	...	...	...	1	0.08	...	0
Ascites ...	2	0.17	Hypertrophy of Left Femur ...	...	...	...	...	1	...	...	...	1	...	0.08	0
Right's Disease ...	1	0.08	Hypertrophy of Glands ...	...	...	1	1	...	...	...	...	1	0.08	...	0
Stricture of Urethra ...	1	0.08	Pneumonia ...	...	...	1	1	...	...	...	...	1	0.08	...	0
Mercurial Tremens ...	2	0.17	Bronchitis ...	1	1	3	5	...	...	...	...	5	0.44	...	0
Alcoholic Poison ...	1	0.08	Contraction of right elbow ...	...	...	...	...	...	...	1	1	1	...	0.08	0
Dose Narcotic-Chlorodyne ...	3	0.26	Asthma ...	...	...	...	...	...	...	2	2	2	...	0.17	0
Cholera ...	10	0.87	Pleurisy ...	...	1	...	1	...	...	...	...	1	0.08	...	0
Asphyxia from Drowning ...	1	0.08	Dyspepsia ...	1	...	2	3	...	...	...	...	3	0.26	...	0
Do. from Drink ...	2	0.17	Hepatitis ...	20	12	59	91	1	1	2	4	95	8.02	0.35	8
Fracture of Skull ...	4	0.35	Diarrhoea ...	2	...	4	6	1	...	...	...	1	0.08	...	0
Gunshot Wound (Self. Infl.) ...	1	0.08	Dysentery ...	20	17	81	118	2	1	...	3	121	10.40	0.26	10
Stricture of Urethra ...	1	0.08	Hæmorrhoids ...	...	...	...	...	...	...	1	1	1	...	0.08	0
Not yet diagnosed ...	1	0.08	Splenitis ...	...	...	1	1	...	...	...	...	1	0.08	...	0
			Ascites ...	...	...	1	1	...	...	...	...	1	0.08	...	0
			Inguinal Hernia ...	1	...	...	1	2	...	1	3	4	0.08	0.26	0
			Fistula in Ano ...	...	...	...	...	1	...	...	...	1	...	0.08	0
			Abscess of Liver ...	2	...	3	5	...	...	...	...	5	0.44	...	0
			Urinary Fistula ...	1	...	1	2	...	...	...	...	2	0.17	...	0
			Stricture of Urethra ...	2	...	3	5	...	...	...	...	5	0.44	...	0
			Bright's Disease ...	2	...	...	2	...	...	...	...	2	0.17	...	0
			Orchitis ...	1	...	...	1	...	...	...	...	1	0.08	...	0
			Talipes Equino-valgus ...	...	...	...	...	1	...	...	...	1	...	0.08	0
			Displacement of Art. Cartilage of Knee ...	1	...	...	1	...	...	...	...	1	0.08	...	0
			Ostitis ...	1	...	...	1	...	...	...	...	1	0.08	...	0
			Synovitis ...	1	...	...	1	...	...	1	1	2	0.08	0.08	0
			Testicles Retained in Inguinal Canal ...	...	...	...	...	...	...	1	1	1	...	0.08	0
			Malformation of Spine ...	...	...	...	...	...	...	1	1	1	...	0.08	0
			Ankylosis ...	...	...	...	...	...	...	1	1	1	...	0.08	0
			Abscess of Cell. Tissue ...	...	...	1	1	...	...	...	...	1	0.08	...	0
			Inflammation of Cell. do. ...	1	...	...	1	...	...	...	...	1	0.08	...	0
			Locomotor Ataxy ...	...	...	...	...	...	...	1	1	1	...	0.08	0
			Tumour ...	1	...	...	1	...	...	...	...	1	0.08	...	0
			Ulcers ...	...	1	1	2	...	2	...	2	4	0.17	0.17	0
			Eczema ...	...	...	1	1	...	...	...	...	1	0.08	...	0
			General Debility ...	33	6	75	114	4	...	6	10	124	10.05	0.88	10
			Anæmia ...	...	8	5	13	...	...	...	...	13	1.14	...	1
			Contusion ...	...	...	...	...	3	...	3	3	...	...	0.26	0
			Fracture ...	2	1	...	3	2	...	1	3	6	0.26	0.26	0
			Wound ...	...	1	...	1	...	...	...	...	1	0.08	...	0
			Gunshot Wound ...	...	...	...	...	2	...	2	2	...	...	0.17	0
			Incised do. ...	...	...	...	...	...	1	1	1	...	...	0.08	0
			Amputation ...	...	...	...	...	1	...	...	1	1	...	0.08	0
Total ...	206	18.04	Total ...	124	69	374	567	43	14	93	150	717	49.99	13.32	63

* According to Stational Returns.

IV.

Table showing the Invaliding in Her Majesty's British Troops arranged according to Stations during the year 1873.

Diseases.	Madras.		Saint Thomas' Mount.		Trichi-nopoly.		Banga-lore.		Canna-nore.		Bellary.		Kamptee.		Secun-derabad.		Rangoon.		Tonghoo.		Thayet-myo.	
	For Discharge from Service.	For Change of Cli-mate.	For Discharge from Service.	For Change of Cli-mate.	For Discharge from Service.	For Change of Cli-mate.	For Discharge from Service.	For Change of Cli-mate.	For Discharge from Service.	For Change of Cli-mate.	For Discharge from Service.	For Change of Cli-mate.	For Discharge from Service.	For Change of Cli-mate.	For Discharge from Service.	For Change of Cli-mate.	For Discharge from Service.	For Change of Cli-mate.	For Discharge from Service.	For Change of Cli-mate.	For Discharge from Service.	For Change of Cli-mate.
Age			1		2		2		1				2									
Rheumatism	2	11	1		2		1	4					1		4	3						
Scrofula											2				1							
Pachisis Pulmonalis	15	4	2				1	19	8	3	3		1		9	9		1	1	1	1	5
Secondary Syphilis	2	1	1	1				8		1	1	2	2		4	1	10	1	2	1		3
Diabetes																						1
Dementia	1						1	1		1												
Sciatica															1							
Spinal Meningitis										1												
Neuralgia							2		1			1	1					1				
Paralysis							2								1	1		1				
Mania	2																1					
Paraplegia																1						
Hypochondriasis									1													
Stroke		2														1						
Epilepsy	3						2		4				1									
Ch. Encephalitis		1																				
Hemiplegia															1	1						
Impaired Vision															2	1						
Amnesia											1											
Retinitis							1															
Cataract																						1
Deafness	1						1						1									
Pericarditis							1															
Palpitation	2	4			1		8		12		1					1						
Hypertrophy of Heart		2			1		2	1	4		1	2			1							
Varicose Veins		1					1					1			1							
Valve Disease of Heart	1	2					1	1	6	1					7	1						2
Aneurism of Abdl. Aorta															1				1			
Fatty Degeneration of Heart					1																	
Hypertrophy of Left Femour					1																	
Do. of Glands	1																					
Pneumonia																1						
Bronchitis								2			1					2						
Contraction of Right Elbow												1										
Asthma															1		1					
Pleurisy																1						
Dyspepsia																2						1
Hepatitis	1	17		1			1	15	1	15	4		5	1	21		5					8
Diarrhoea	1							1			1		1		2							1
Dysentery		5		4		2		15	1	16	2		2	1	59		3	1	3			7
Hæmorrhoids															1							
Splenitis		1																				
Ascites																						1
Inguinal Hernia			1					1			1										1	
Fistula in Ano			1																			
Abscess of Liver				1						3			1									
Urinary Fistula								1										1				
Stricture of Urethra		2		1				2														
Bright's Disease				1												1						
Orchitis																						1
Talipes Equino-Valgus																		1				
Displacement of Art. Cartilage of Knee						1																
Ostitis						1																
Synovitis							1				1											
Testicles Retained in Ingl. Can.							1															
Malformation of Spine						1																
Ankylosis												1										
Abscess of Cellular Tissue												1										
Inflammation of Cellular do.								1														
Locomotor Ataxy																	1					
Tumour				1																		
Ulcers		1						1							2							
Eczema								1														
General Debility	16	1	8					6	2	9	12		8	2	39	2	3		2	3	11	
Anæmia	4							8									1					
Contusion			1									1									1	
Fracture			1					3				1									1	
Wound								1														
Gunshot Wound			1		1																	
Incised do.									1													
Amputation			1																			
Total	81	75	10	20	2	10	11	111	20	73	11	25	11	27	35	153	7	21	5	6	7	41

Table showing the Ratio of Invaliding in Her Majesty's British Troops arranged according to Stations during the year 1873.

Diseases.	Madras.		St. Thos' Mount.		Trichinopoly.		Bangalore.		Cannanore.		Bellary.		Kamptee.		Secunderabad.		Rangoon.		Tonghoo.		Thayetmyoo.	
	For Discharge from Service.	For Change of Climate.	For Discharge from Service.	For Change of Climate.	For Discharge from Service.	For Change of Climate.	For Discharge from Service.	For Change of Climate.	For Discharge from Service.	For Change of Climate.	For Discharge from Service.	For Change of Climate.	For Discharge from Service.	For Change of Climate.	For Discharge from Service.	For Change of Climate.	For Discharge from Service.	For Change of Climate.	For Discharge from Service.	For Change of Climate.	For Discharge from Service.	For Change of Climate.
Ague	2.84	15.62	...	...	2.84	6.87	1.10	...	1.55	...	...	...	2.002	...	...	...	...	...	...	...	...	...
Rheumatism	...	...	...	...	2.84	6.87	0.55	2.21	...	...	...	...	1.001	1.64	1.23	...	3.13	...	...	...	...	...
Scrofula	...	...	...	...	...	...	...	...	...	...	2.12	...	1.001	...	...	...	...	...	...	...	...	...
Phthisis Pulmonalis	21.30	5.68	5.68	...	...	0.55	10.49	12.44	4.66	3.19	...	...	1.001	3.69	3.69	...	1.04	2.14	2.14	1.71	8.56	...
Secondary Syphilis	2.84	1.42	2.84	...	...	...	4.42	...	1.55	1.06	2.12	2.002	4.004	0.41	4.105	1.04	2.08	2.14	...	...	3.42	1.71
Diabetes	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dementia	1.42	...	...	...	...	0.55	0.55	...	1.55	...	...	...	...	...	...	...	...	...	...	...	...	...
Sciatica	...	...	...	...	...	...	...	...	...	...	...	...	...	0.41	...	...	...	...	...	...	...	...
Spinal Meningitis	...	...	...	...	...	...	...	...	...	...	...	...	1.001	1.001	...	...	...	...	...	...	...	...
Neuralgia	...	...	...	...	...	...	1.10	...	1.55	...	...	...	...	...	...	...	...	...	...	...	...	...
Paralysis	...	...	...	...	...	...	1.10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mania	2.84	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.04	...	...	...	...	...
Paraplegia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hypochondriasis	...	...	...	...	...	...	...	...	1.55	...	...	...	...	...	...	...	...	...	...	...	...	...
Sunstroke	...	2.84	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Epilepsy	4.26	...	...	...	...	...	1.10	...	6.22	...	...	...	1.001	...	...	...	...	...	...	...	...	...
Ch. Encephalitis	...	1.42	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hemiplegia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.41	0.41	...	...	...	...	...	...
Impaired Vision	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Amaurosis	...	...	...	...	...	...	...	...	...	...	1.06	...	...	...	...	...	0.82	1.04	...	...	...	...
Retinitis	...	...	...	...	...	...	0.55	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cataract	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Deafness	1.42	...	...	...	...	...	0.55	...	...	...	...	...	1.001	...	...	...	...	...	...	...	...	1.71
Pericarditis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palpitation	2.84	5.68	...	...	3.43	...	4.42	...	18.66	...	1.06	...	...	...	...	...	0.41	...	...	...	...	...
Hypertrophy of Heart	...	2.84	...	...	...	...	1.10	...	1.55	6.22	...	1.06	2.002	...	0.41	...	...	...	...	...	...	...
Varicose Veins	...	1.42	...	...	...	...	0.55	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Valve Dis. of Heart	1.42	2.84	...	...	...	...	0.55	0.55	1.55	9.33	1.06	...	...	...	2.87	0.41	...	...	...	...	...	...
Aneurism of Aorta	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fatty Degeneration of Heart	...	...	...	...	...	3.43	...	...	...	...	...	...	...	...	...	...	...	...	2.14	...	...	3.42
Hypertrophy of Left Ventricle	...	...	...	...	...	...	0.55	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Do. of Glands	...	1.42	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pneumonia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bronchitis	...	...	...	...	...	...	1.10	...	...	...	1.06	...	...	...	...	...	...	...	...	...	...	...
Contraction of Right Elbow	...	...	...	...	...	...	...	...	...	...	...	...	1.001	...	...	...	...	...	...	...	...	...
Asthma	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pleurisy	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dyspepsia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hepatitis	1.42	24.14	...	2.84	...	0.55	8.28	1.55	23.33	...	4.25	...	5.005	0.41	8.62	...	5.22	...	...	...	1.71	13.68
Diarrhoea	1.42	...	...	...	...	...	0.55	...	...	...	1.06	...	1.001	...	...	...	...	...	...	...	...	...
Dysentery	...	7.10	...	11.36	...	6.87	8.28	1.55	24.88	...	2.12	...	2.002	0.41	24.22	...	3.13	2.14	6.44	...	...	11.92
Hæmorrhoids	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Splenitis	...	1.42	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ascites	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Inguinal Hernia	...	...	2.84	...	...	...	0.55	...	...	1.06	...	...	...	...	...	...	...	...	...	...	...	...
Fistula in Ano	...	...	2.84	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Abscess of Liver	...	...	...	2.84	...	...	...	...	4.66	...	...	...	1.001	...	...	...	...	...	...	...	...	...
Urinary Fistula	...	...	...	...	...	...	0.55	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Stricture of Urethra	...	2.84	...	2.84	...	...	1.10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bright's Disease	...	...	...	2.84	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Orchitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Talipes Equino-Valgus	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Displacement of Art. Cartilage of Knee	...	...	...	...	...	3.43	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ostitis	...	...	...	...	...	3.43	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Synovitis	...	...	...	...	...	...	0.55	...	...	1.06	...	...	...	...	...	...	...	...	...	...	...	...
Testicles Retained in Inguinal Canal	...	...	...	...	...	...	0.55	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malformation of Spine	...	...	...	...	...	...	0.55	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ankylosis	...	...	...	...	...	...	...	...	...	...	1.06	...	...	...	...	...	...	...	...	...	...	...
Abscess of Cell. Tissue	...	...	...	...	...	...	...	...	...	...	...	1.06	...	...	...	...	...	...	...	...	...	...
Inflammation of Coll. do.	...	...	...	...	...	...	0.55	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Locomotor Ataxy	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tumour	...	...	2.84	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ulcers	...	1.42	...	...	...	...	0.55	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Eczema	...	...	...	...	...	...	0.55	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
General Debility	...	22.72	2.84	22.72	...	...	3.31	3.11	13.99	...	12.75	...	8.008	0.82	16.01	2.08	3.13	...	4.29	5.14	18.83	...
Anæmia	...	5.68	...	...	...	...	4.42	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Contusion	...	...	2.84	...	...	...	...	...	...	...	...	...	1.001	...	...	...	...	...	...	...	...	...
Fracture	...	...	2.84	...	...	...	...	...	...	...	...	...	1.001	...	...	...	...	...	...	...	...	...
Wound	...	...	...	...	...	...	1.66	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gunshot Wound	...	...	2.84	...	3.43	...	0.55	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Incised do.	...	...	...	...	...	...	...	...	1.55	...	...	...	...	...	...	...	...	...	...	...	...	...
Amputation	...	...	2.84	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	44.03	106.53	28.40	56.82	6.87	34.36	6.07	61.23	31.10	113.53	11.69	26.57	11.01	27.02	14.36	64.86	7.31	21.94	10.72	12.88	11.99	70.20

Table showing the Sickness and Mortality among the whole European Army stationed in the Madras Presidency during the year 1873, and the Prevalence of the Principal Diseases in each Quarter of the year.

Quarter.	Average Strength.		Total Admissions.		Total Deaths in Hospital.		Average Daily Sick.		Admissions into Hospital.																Deaths in Hospital.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
	Small-pox.	Dengue Fever.	Typhus Fever.	Typhoid Fever.	Continued Fever.	Intermittent Fever.	Remittent Fever.	Cholera.	Rheumatism.	Phtisis Pulmonalis.	Scurvy.	Atrophy and Anæmia.	Dropsies.	Stroke and Heart-apoplexy.	Heart Diseases.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Diseases.	Spleen Diseases.	Veneral Diseases.	Abscesses.	Skin Diseases.	Delirium Tremens.	Violence and Accidents.	All other Causes.	Small-pox.	Dengue Fever.	Typhus Fever.	Typhoid Fever.	Continued Fever.	Intermittent Fever.	Remittent Fever.	Cholera.	Rheumatism.	Phtisis Pulmonalis.	Scurvy.	Atrophy and Anæmia.	Dropsies.	Stroke and Heart-apoplexy.	Heart Diseases.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Diseases.	Spleen Diseases.	Veneral Diseases.	Abscesses.	Skin Diseases.	Delirium Tremens.	Violence and Accidents.	All other Causes.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
First Quarter.	...	115	...	26	327	320	20	...	89	24	...	8	1	5	46	122	198	196	188	8	391	18	200	11	265	775	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

VII.

Table showing Sickness and Mortality among the European Troops at each Station of the Madras Presidency during the year 1873.

Stations.	Average Strength.	Total Admissions.	Average Daily Sick.	Deaths		Ratio per 1,000 of Strength.			
				In Hospital.	Out of Hospital.	Admissions.	Average Daily Sick.	Deaths in Hospital.	Deaths out of Hospital.
Fort Saint George ...	704	785	45.39	8	2	1115.05	64.47	11.36	2.84
Saint Thomas' Mount ...	352	437	20.69	3	1	1241.48	58.78	8.52	2.84
Poonamallee ...	138	352	49.25	8	...	2550.72	356.88	57.97	...
Palaveram ...	95	59	2.15	...	...	621.05	22.63	...	...
Trichinopoly ...	291	424	24.02	5	2	1457.05	82.54	17.18	6.87
Wellington ...	454	673	41.38	10	...	1482.37	91.14	22.03	...
Bangalore ...	1,811	2,011	98.86	12	3	1110.43	54.59	6.62	1.66
Cannanore ...	643	1,123	43.01	16	...	1746.50	66.87	24.88	...
Calicut ...	82	125	6.01	...	...	1524.39	73.29	...	...
Maliapooram ...	80	114	5.19	1	...	1415.0	64.87	12.50	...
Bellary ...	941	933	59.83	12	2	991.49	63.58	12.75	2.12
Ramandroog ...	50	48	2.57	...	...	960.0	51.40	...	...
Secunderabad ...	2,436	3,114	124.62	49	5	1278.32	51.16	20.11	2.05
Kamptee ...	999	1,975	61.72	6	6	1876.98	61.78	6.006	6.006
Seetabuldee ...	47	61	1.08	...	...	1297.87	22.98	...	...
Rangoon ...	957	1,039	37.36	16	2	1085.68	39.04	16.72	2.09
Thayetmyo ...	584	531	22.22	20	3	909.24	38.04	34.24	5.13
Tonghoo ...	466	409	20.86	6	1	877.68	44.76	12.82	2.14
Port Blair ...	102	40	0.93	1	1	392.15	9.11	9.80	9.80
<i>European Veterans.</i>									
Palaveram ...	120	47	1.66	2	1	391.67	13.83	16.68	8.33
Vizagapatam ...	66	39	1.71	2	...	590.91	25.91	30.30	...
Total ...	11,418	14,339	670.51	177	29	1255.82	58.72	15.50	2.54

Table showing the Principal Diseases which have contributed to make up the Admissions into Hospital among the European Troops at each Station during 1873.

Stations.	Admissions from																														
	Strength.	Small-pox.										Cholera.	Rheumatism.	Phthisis Pulmonalis.	Goury.	Atrophy and Anæmia.	Dropsies.	Gunstroke and Heat-apoplexy.	Heart Diseases.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Diseases.	Spleen Diseases.	Venereal Diseases.	Abscesses.	Skin Diseases.	Delirium Tremens.	Violence and Accidents.	All other Diseases.	Total Admissions.
Fort Saint George ...	704	...	...	...	...	13	...	...	60	21	...	23	...	...	...	1	33	27	28	28	14	47	5	83	4	101	3	71	209	785	
Saint Thomas' Mount.	852	...	...	...	...	29	5	...	4	1	...	...	...	...	...	1	11	9	35	33	33	26	...	51	3	53	3	49	98	487	
Poonamallee ...	138	...	...	...	...	4	...	...	9	6	...	2	...	...	...	1	...	10	47	17	17	80	...	28	...	2	2	7	93	852	
Palaveram ...	95	...	...	...	...	2	1	...	9	...	...	...	...	...	...	...	...	2	1	2	2	5	...	10	...	9	9	8	11	59	
Trichinopoly ...	291	...	...	...	...	22	...	...	9	...	...	...	...	...	...	2	7	10	27	4	4	22	1	47	5	19	9	1	43	95	
Wellington ...	454	...	...	...	...	81	3	...	27	8	1	...	...	...	...	...	32	31	21	27	27	49	5	69	4	35	4	23	243	673	
Bangalore ...	1,811	...	...	...	...	89	3	...	57	31	...	20	...	...	1	41	72	137	87	87	98	7	297	18	148	4	202	430	2,011		
Cananore ...	643	...	...	...	...	2	...	...	16	7	...	5	...	...	2	69	34	171	107	107	140	...	60	23	99	1	36	196	1,123		
Calicut ...	82	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	18	4	10	14	14	9	...	12	2	7	...	4	26	125	
Malluspooram...	80	...	...	...	...	...	...	...	3	1	...	...	...	...	...	...	...	2	32	18	28	21	...	7	4	12	...	2	18	114	
Bellary ...	941	...	...	...	...	28	...	...	20	2	1	...	...	...	...	6	12	16	28	28	28	21	...	341	4	49	...	55	238	933	
Ramandroog ...	50	...	...	...	...	13	...	...	...	...	...	...	...	...	...	...	...	3	...	3	3	...	...	...	4	2	1	...	3	16	48
Secunderabad...	2,436	...	...	...	...	127	60	...	108	23	...	6	1	...	3	30	149	276	264	264	239	7	287	27	166	10	302	791	8,114		
Kamptee ...	999	...	...	...	...	933	9	...	24	3	...	...	...	...	2	21	56	31	66	66	25	25	2	197	10	73	1	109	305	1,975	
Seetabuldee ...	47	...	...	...	...	9	...	...	...	...	...	...	...	...	...	...	...	2	2	2	2	...	...	...	...	4	4	...	5	10	61
Rangoon ...	957	...	...	...	...	7	...	...	30	4	...	7	...	...	5	13	52	64	104	104	49	...	118	9	120	...	78	187	1,039	...	
Thayetmyo ...	584	...	...	...	...	15	3	...	7	6	...	1	...	...	15	15	25	18	36	36	85	...	25	...	43	4	48	180	531	...	
Tonghoo ...	466	...	...	...	...	21	...	...	11	4	...	...	...	...	3	8	8	123	26	26	76	1	59	4	11	2	19	84	409	...	
Port Blair ...	102	...	...	...	...	1	...	...	1	...	...	...	...	...	...	1	2	...	...	1	1	10	...	3	1	5	...	5	5	40	...
European Veterans.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palaveram ...	120	...	...	...	...	5	...	...	1	...	...	...	...	...	...	1	2	...	...	1	1	3	...	...	1	3	1	2	24	47	...
Visagapatam ...	66	...	...	...	...	...	...	...	5	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	5	...	2	16	39	...
Total ...	11,418	6,811	...	51	1,083	1,396	83	23	394	123	2	64	5	21	302	502	1,038	855	936	30	1,688	121	964	38	1,074	3,224	...	...	...	14,389	...

IX.

Table showing the Principal Diseases which have contributed to make up the Deaths in Hospital among the European Troops at each Station during 1873.

Stations.	Strength.	Deaths from																Total Deaths.										
		Small-pox.	Dengue Fever.	Typhus Fever.	Typhoid Fever.	Continued Fever.	Intermittent Fever.	Remittent Fever.	Cholera.	Rheumatism.	Phthisis Pulmonalis.	Scurvy.	Atrophy and Anæmia.	Dropsies.	Stroke and Heat-apoplexy.	Heart Diseases.	Respiratory Diseases.		Dysentery.	Diarrhoea.	Hepatic Diseases.	Spleen Diseases.	Veneral Diseases.	Abscesses.	Skin Diseases.	Delirium Tremens.	Violence and Accidents.	All other Diseases.
Fort Saint George	704	..	..	..	..	..	..	..	..	2	..	..	..	..	2	1	..	2	..	2	..	..	..	..	..	1	8	
St. Thomas' Mount	352	..	..	..	..	..	..	..	..	3	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	3	
Poonamallee	138	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	
Palaveram	95	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	1	..	..	..	..	..	..	5	
Trichinopoly	291	..	..	..	..	..	..	..	..	2	..	..	..	..	..	2	1	1	..	2	..	..	..	..	..	..	10	
Wellington	454	..	..	..	1	..	..	..	..	..	..	..	..	..	1	1	1	2	..	5	..	..	..	..	..	1	12	
Bangalore	1,811	..	..	..	6	..	..	..	..	1	..	..	..	..	..	1	1	2	..	7	..	..	..	..	..	1	12	
Cannanore	643	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	16	
Calicut	82	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
Mallapooram	80	..	..	..	..	..	..	..	..	1	..	..	..	..	2	2	..	1	..	1	..	1	..	..	..	..	1	
Bellary	941	..	..	..	..	2	..	..	..	..	..	..	..	..	..	3	2	18	..	22	..	..	..	..	..	2	12	
Ramandroog	50	..	..	..	..	..	..	2	..	1	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	1	1	
Secunderabad	2,436	..	..	..	..	..	..	2	..	1	..	..	..	..	..	3	2	..	..	1	..	..	..	..	..	1	49	
Kamptee	999	1	..	..	..	..	..	2	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	1	6	
Sectabuldee	47	..	..	..	..	..	..	..	..	1	..	..	..	..	..	2	..	4	..	4	..	..	..	..	2	..	16	
Rangoon	957	..	..	..	1	..	..	..	12	..	1	..	..	..	2	2	..	4	..	1	..	..	..	..	..	1	20	
Thayetmyo	584	..	..	..	2	..	..	..	..	..	..	..	..	..	..	4	..	..	1	4	..	..	..	..	..	..	6	
Tonghoo	466	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	6	
Port Blair	102	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	
European Veterans.		..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	
Palaveram	120	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	2	
Vizagapatam	66	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	
Total	11,418	1	..	..	10	3	..	4	12	..	11	..	..	..	7	21	6	32	2	54	..	1	..	..	..	4	8	177

Table showing the Ratio per 1,000 of Strength of the Principal Diseases which have contributed to make up the Admissions into Hospital among the European Troops at each Station during 1873

Stations.	Admissions from																										
	Small-pox.	Dengue Fever.	Typhus Fever.	Typhoid Fever.	Continued Fever.	Intermittent Fever.	Remittent Fever.	Cholera.	Rheumatism.	Phthisis Pulmonalis.	Scurvy.	Atrophy and Anæmia.	Dropsies.	Gunstroke and Heat-apoplexy.	Heart Diseases.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Diseases.	Spleen Diseases.	Veneral Diseases.	Abscesses.	Skin Diseases.	Delirium Tremens.	Violence and Accidents.	All other Diseases.	Total Admissions.
Fort Saint George.	...	...	...	...	69-66	18-45	...	...	85-22	29-82	...	32-67	...	1-42	46-87	38-35	39-77	19-88	66-76	7-10	117-89	5-68	143-46	4-26	100-85	286-87	1115-05
St. Thomas' Mount	...	42-61	...	...	56-82	82-39	14-20	...	11-36	2-84	...	...	...	8-52	2-84	25-57	99-43	93-75	73-86	7-24	202-89	8-52	147-78	8-52	138-20	278-40	1241-48
Poonamallee	...	...	...	...	231-88	28-99	...	...	65-22	43-48	...	14-49	7-24	7-24	79-71	79-46	340-57	123-19	579-71	...	144-89	...	14-49	7-24	60-72	678-91	3550-72
Palavaram	...	...	...	...	52-63	21-05	10-52	...	21-05	...	...	...	...	...	...	21-05	10-52	21-05	52-63	10-52	105-26	...	94-78	...	84-21	115-78	621-06
Trichinopoly	3-43	278-35	...	...	79-04	75-60	...	...	30-93	...	...	...	...	6-87	24-05	34-36	92-78	13-75	75-60	3-43	161-51	17-18	65-29	3-43	184-95	326-46	1457-05
Wellington	...	...	...	8-81	44-05	178-41	3-40	...	59-47	17-60	...	...	2-20	...	70-43	46-25	46-25	59-47	107-92	11-01	151-98	8-81	77-09	...	55-60	585-24	1482-37
Bangalore	...	14-90	...	4-97	127-55	49-14	1-65	...	31-47	17-11	...	11-04	...	0-55	22-64	39-75	75-64	48-04	54-11	3-86	163-99	9-94	81-72	3-31	111-54	237-43	1110-43
Cannanore	...	...	...	46-65	197-51	3-11	...	...	24-88	10-88	...	7-78	1-56	24-39	107-30	63-88	265-94	166-40	217-72	...	93-31	35-77	153-97	1-56	55-98	303-26	1746-50
Calicut	...	...	...	...	195-12	...	...	...	...	12-19	...	...	...	...	219-51	48-78	121-95	170-73	109-75	...	146-34	24-39	85-35	...	48-78	317-07	1524-39
Mallapooram	...	...	...	...	37-50	...	...	...	87-50	12-50	...	...	...	...	...	25-0	400	225	150	...	87-5	50	150	...	25-0	255	1425-0
Bellary	...	...	...	...	124-33	24-44	...	...	21-25	2-12	1-06	...	...	...	6-37	12-75	17-00	29-75	22-31	...	362-38	4-25	52-07	...	53-44	252-98	991-49
Ramandroog	...	...	...	...	60	260	...	...	...	...	...	...	...	...	...	60	...	60	...	...	80	40	20	...	60	320	960
Secunderabad	0-41	0-82	...	0-41	106-32	52-13	24-63	...	44-33	11-49	...	2-46	0-41	1-23	12-31	61-17	113-30	108-37	94-02	2-87	109-60	11-08	68-14	4-10	123-97	324-71	1278-32
Kamptee	4-00	57-05	...	...	46-04	938-93	9-00	...	24-02	3-00	...	...	...	2-00	21-02	56-06	31-03	66-06	25-02	3-00	197-19	10-31	73-07	1-00	109-11	305-30	1976-98
Seetabuldee	...	468-09	...	...	106-38	191-49	...	...	...	...	...	...	...	21-28	...	...	42-55	...	...	...	106-38	...	85-10	...	63-83	210-64	1297-87
Rangoon	...	110-76	...	5-22	86-73	7-31	...	...	31-34	4-18	...	7-31	...	5-22	13-58	54-33	66-87	108-67	51-20	...	123-30	9-40	125-89	...	79-41	195-40	1085-68
Thayetmyo	...	...	...	1-71	66-78	25-63	5-13	...	11-98	10-27	...	1-71	...	...	25-68	42-80	30-82	61-64	59-93	...	42-80	...	73-63	6-84	82-19	325-94	809-24
Tongboe	...	...	...	2-14	8-58	45-06	...	...	23-60	8-58	...	...	...	...	6-43	17-16	261-80	55-79	163-09	2-14	126-61	8-58	23-60	4-29	40-77	72-96	877-68
Fort Blair	...	...	...	...	49-02	9-80	...	...	9-80	...	...	...	...	...	9-80	19-60	...	9-80	98-04	...	29-41	9-80	49-02	...	49-02	49-02	892-15
European Veterans																											
Palavaram	...	...	...	...	16-66	41-06	...	...	8-33	...	...	...	8-33	...	6-33	16-66	...	6-33	25-0	...	...	8-33	25-0	3-33	15-66	200-0	391-65
Vizagapatam	...	...	...	...	15-15	...	...	...	75-75	...	...	...	...	...	...	30-30	...	45-45	...	...	75-75	...	75-75	...	30-30	242-42	590-91
Total	0-52	27-23	...	4-46	94-85	122-26	7-27	2-01	34-50	10-77	0-17	5-60	0-44	1-84	26-45	43-09	90-90	74-88	81-97	2-62	147-82	10-59	84-42	2-89	94-10	288-27	1255-83

XII.

Table showing the Number of Admissions and Deaths under Different Classes of Diseases among the European Troops at each Station during 1873.

Stations.	General Diseases.		Local Diseases.		Condi- tions.		Poisons.		Injuries.		Surgical Operations.		Not yet Diagnosed.		No Appre- ciable Disease.	
	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.
Fort Saint George ...	214	3	478	5	19	...	3	...	71	...	...	...	...	...	...	...
Saint Thomas' Mount.	92	...	284	2	8	...	3	...	49	1	...	...	1	...	...	...
Poonamallee ...	80	3	236	5	27	...	2	...	7	...	...	...	...	...	...	...
Palaveram ...	13	...	37	...	1	...	...	...	8	...	...	...	...	...	...	...
Trichinopoly ...	147	...	219	4	6	...	1	1	48	...	1	...	1	...	1	...
Wellington ...	198	4	398	6	54	...	...	...	23	...	...	...	...	...	...	...
Bangalore ...	630	...	1,116	11	54	...	9	...	202	1	...	...	...	...	...	...
Cannanore ...	209	8	853	8	7	...	1	...	36	...	1	...	13	...	3	...
Calicut ...	27	...	90	...	8	...	...	...	4	...	...	...	...	...	1	...
Malliapooram...	11	...	96	1	3	...	...	...	3	...	...	...	1	...	...	...
Bellary ...	420	3	454	9	4	...	...	...	55	...	...	...	...	...	...	...
Ramandroog ...	19	...	25	...	1	...	...	...	3	...	...	...	...	...	...	...
Secunderabad ...	747	3	1,928	45	121	...	14	1	302	...	1	...	...	...	1	...
Kamptee ...	1,227	3	606	3	22	...	8	...	109	...	1	...	...	...	2	...
Seetabuldee ...	38	...	19	...	1	...	...	...	3	...	...	...	...	...	...	...
Rangoon ...	348	2	598	12	15	...	2	...	76	2	...	...	...	...	...	...
Thayetmyo ...	120	14	335	6	21	...	4	...	48	...	2	...	1	...	...	...
Tonghoo ...	87	...	285	6	14	...	2	...	19	...	...	...	1	...	1	...
Port Blair ...	9	...	26	1	...	...	...	...	5	...	...	...	...	...	...	...
<i>European Veterans.</i>																
Palaveram ...	9	...	25	2	2	...	9	...	2	...	...	...	...	...	...	...
Vizagapatam ...	13	1	18	1	1	...	5	...	2	...	...	...	...	...	...	...
Total ...	4,658	44	8,126	127	384	...	63	2	1,075	4	6	...	18	...	9	...

XIII.

Table showing the Admissions and Deaths under Different Orders of Diseases among the European Troops at each Station during the year 1873.

Stations.	General Diseases.				Local Diseases.																											
	Sub-Division A.		Sub-Division B.		Diseases of the Nervous System.		Diseases of the Eye.		Diseases of the Ear.		Diseases of the Nose.		Diseases of the Circulatory System.		Diseases of the Absor- bent System.		Ductless Glands.		Diseases of the Respira- tory System.		Diseases of the Diges- tive System.		Diseases of the Urinary System.		Diseases of the Genera- tive System.		Diseases of the Organs of Locomotion.		Diseases of the Cellular Tissue.		Diseases of the Cutane- ous System.	
	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.
Fort Saint George ...	58	...	156	3	12	...	5	...	30	...	...	...	33	1	26	...	...	...	27	...	182	4	40	...	16	...	2	...	4	...	101	...
Saint Thomas' Mount ...	69	...	23	...	11	...	3	...	4	...	...	...	1	2	12	...	...	...	9	...	129	...	39	...	6	...	2	...	16	...	52	...
Poonamallee ...	36	...	44	3	13	...	2	...	...	...	...	...	11	...	5	...	...	...	10	...	182	3	8	...	2	...	1	...	...	...	2	...
Palaveram ...	8	...	5	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	2	...	16	...	7	...	...	...	1	...	...	...	9	...
Trichinopoly...	127	...	20	...	3	...	4	...	1	...	...	...	7	10	...	...	...	...	10	...	115	1	37	...	8	...	...	...	5	...	19	...
Wellington ...	113	2	85	2	36	...	12	...	13	...	...	...	32	2	8	...	...	...	21	...	183	3	27	...	16	...	4	...	11	...	35	...
Bangalore ...	300	...	270	...	27	...	69	...	18	...	1	...	41	1	37	...	...	...	72	...	490	7	142	...	32	...	12	...	27	...	148	...
Cannanore ...	159	6	50	2	12	...	4	...	8	...	...	...	69	...	5	...	...	...	34	...	528	8	52	...	7	...	6	...	29	...	99	...
Calicut ...	16	...	11	...	14	...	...	...	...	...	...	...	18	...	...	...	...	...	4	...	41	...	2	...	1	...	...	...	3	...	7	...
Mallapooram ...	4	...	7	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	72	...	4	...	...	...	1	...	4	...	12	...
Bellary ...	141	2	276	1	5	...	44	...	5	...	...	...	6	2	62	...	...	...	12	...	131	4	93	...	8	...	3	...	36	...	49	...
Ramandroog...	17	...	2	...	...	...	3	...	...	...	...	...	...	...	5	...	...	...	...	...	5	...	2	...	...	...	...	...	8	...	1	...
Secunderabad ...	455	2	292	1	38	...	45	...	21	...	3	...	30	3	68	...	...	...	149	...	1,187	40	143	...	41	...	7	...	30	...	166	...
Kamptee ...	1,056	3	171	...	26	...	31	...	25	...	1	...	21	2	19	...	...	...	56	...	257	1	65	...	10	...	...	...	22	...	73	...
Sectabuldee ...	36	...	2	...	1	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	6	...	4	...	1	...	...	...	1	...	4	...
Rangoon ...	229	1	119	1	13	...	9	...	4	...	...	...	13	2	9	...	...	...	52	...	317	8	44	...	5	...	3	...	9	...	120	...
Thayetmyo ...	82	14	38	...	8	...	11	...	1	...	...	...	15	4	3	...	...	...	25	...	191	1	13	...	1	...	...	...	3	...	43	...
Tonghoo ...	29	...	58	...	...	...	2	...	...	...	...	...	3	...	1	...	...	...	8	...	239	6	16	...	10	...	1	...	4	...	11	...
Port Blair ...	6	...	3	...	...	...	2	...	...	...	...	...	1	1	...	...	...	...	2	...	13	...	1	...	...	...	...	...	2	...	5	...
European Veterans.																																
Palaveram ...	7	...	2	...	4	...	3	...	1	...	1	...	1	1	...	...	...	...	2	...	9	1	...	...	...	...	...	...	1	...	3	...
Vizagapatam ...	2	...	11	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	8	1	...	...	...	...	...	...	...	...	5	...
Total ...	3,013	80	1,645	14	225	6	249	...	131	...	6	...	302	21	275	...	...	...	502	6	4,301	89	740	3	166	...	55	...	210	...	964	...

XIII.—(Continued.)

Table showing the Admissions and Deaths under Different Orders of Diseases among the European Troops at each Station during the year 1873.

Stations.	Conditions.		Poisons.		Injuries.										Surgical Operations.		Not yet Diagnosed.		No Appreciable Disease.	
					Battle.		Accidents.		Homicidal.		Self-inflicted.		Judicial.							
	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.		
Fort Saint George ...	19	...	3	...	...	...	71	...	...	...	...	...	...	...	...	...	...	...		
Saint Thomas' Mount..	8	...	3	...	...	...	49	1	...	...	...	...	...	...	...	...	1	...		
Poonamallee ...	27	...	2	...	...	...	7	...	...	...	...	...	...	...	...	...	...	...		
Palaveram ...	1	...	...	...	...	...	8	...	...	...	...	...	...	...	...	...	...	...		
Trichinopoly ...	6	...	1	1	...	...	48	...	...	...	...	...	...	1	...	1	...	1		
Wellington ...	54	...	...	...	...	...	23	...	...	...	...	...	...	...	...	...	...	...		
Bangalore ...	54	...	9	...	...	...	202	1	...	...	...	...	...	...	...	...	...	...		
Cannanore ...	7	...	1	...	...	...	36	...	...	...	...	...	...	1	...	13	...	3		
Calicut ...	3	...	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	1		
Mallapooram...	3	...	...	...	1	...	2	...	...	...	...	...	...	...	...	1	...	...		
Bellary ...	4	...	...	...	...	...	55	...	...	...	...	...	...	...	...	...	...	...		
Ramandroog ...	1	...	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...		
Secunderabad ...	121	...	14	1	...	...	302	...	...	...	...	...	...	1	...	...	...	1		
Kamptee ...	22	...	8	...	...	...	109	...	...	...	...	...	...	1	...	...	...	2		
Seetabuldee ...	1	...	...	...	...	...	2	...	1	...	...	...	...	...	...	...	...	...		
Rangoon ...	15	...	2	...	...	...	75	2	...	...	1	...	...	...	...	...	...	...		
Thayetmyo ...	21	...	4	...	...	...	48	...	...	...	...	...	...	2	...	1	...	...		
Tonghoo ...	14	...	2	...	...	...	19	...	...	...	...	...	...	...	...	1	...	1		
Port Blair ...	...	...	...	...	...	...	5	...	...	...	...	...	...	...	...	...	...	...		
European Veterans.																				
Palaveram ...	2	...	9	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...		
Vinagapatam ...	1	...	5	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...		
Total ...	384	...	63	2	1	...	1,072	4	1	...	1	...	...	6	...	18	...	9		

**NATIVE
ARMY RETURNS.**

I.

Table showing the Increase and Decrease among the Native Army serving in the Madras Presidency during the year 1873.

	Sappers and Miners.	Artillery.	Cavalry.	Infantry.	Sappers and Miners.	Artillery.	Cavalry.	Infantry.	Total Madras Army.
Strength on 1st January 1873 ...	...	...	...	...	1,306	424	1,240	28,263	31,233
<i>Increase.</i>									
By recruits	54	1	5	1,276	...	...	...	...	...
By transfers	...	7	...	1	...	...	...	...	...
Joined from desertion	2	...	1	8	...	...	...	...	...
By other causes	...	1	...	9	...	...	...	...	...
Total Increase ...	...	...	...	...	56	9	6	1,294	1,365
					1,362	433	1,246	29,557	32,598
<i>Decrease.</i>									
By invaliding	27	...	59	877	...	...	...	...	...
By reduction of establishment ...	...	...	...	...	...	...	...	...	...
Discharged { by summary dismissal ...	6	4	3	160	...	...	...	...	...
{ by Court-Martial ...	4	...	1	49	...	...	...	...	...
By desertion	5	...	4	58	...	...	...	...	...
By deaths	12	3	12	281	...	...	...	...	...
By other causes	5	7	6	...	...	...	...	...	...
Total Decrease ...	...	...	...	...	59	14	85	1,425	1,583
Strength on 1st January 1874 ...	...	...	...	...	1,303	419	1,161	28,132	31,015

II.

Table showing the Sickness and Mortality among the whole Native Army Stationed in the Madras Presidency during the year 1878, and the Prevalence of the Principal Diseases in each Quarter of the year.

Quarter.	Admissions into Hospital.										Deaths in Hospital.																				
	Average Strength.	Total Admissions.	Total Deaths in Hospital.	Total Deaths out of Hospital.	Average Daily Sick.	Small-pox.	Dengue Fever.	Typhus Fever.	Typhoid Fever.	Continued Fever.	Intermittent Fever.	Remittent Fever.	Cholera.	Rheumatism.	Phtisis Pulmonalis.	Scurvy.	Atrophy and Anæmia.	Dropsies.	Stroke and Heart Apoplexy.	Heart Diseases.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Diseases.	Spleen Diseases.	Veneral Diseases.	Abcesses.	Skin Diseases.	Delirium Tremens.	Violence and Accidents.	All other Diseases.
1st Quarter...	25,205	5,308	28	12	806.51	94	1,177	...	1	131	1,191	12	...	320	19	2	9	15	...	17	177	92	106	10	11	98	106	718	2	284	716
2nd do. ...	25,960	5,808	53	13	771.54	198	1,414	...	...	270	1,172	22	...	293	16	...	23	1	...	19	131	150	167	10	8	105	114	620	...	280	795
3rd do. ...	26,206	5,735	38	15	791.33	11	724	...	...	181	1,790	8	1	270	17	1	20	12	1	20	157	270	184	9	10	114	121	593	...	284	937
4th do. ...	26,232	6,024	43	8	878.22	5	109	...	2	300	1,994	30	...	347	26	...	28	34	1	27	260	212	196	14	17	93	110	780	1	405	1,033
For the year..	25,900	22,875	167	48	811.90	308	3,424	...	3	832	6,147	72	1	1,230	78	3	80	62	2	38	725	724	653	43	46	410	451	2,711	3	1,253	3,481
Ratio per 1,000 of Strength for the year ...	11.89	132.20	...	0.11	34.05	237.33	277.03	47.49	3.01	0.11	3.08	2.39	0.07	3.20	27.99	27.95	25.21	1.66	1.77	15.83	17.41	104.67	0.11	48.37	134.40	...	...	...	...	...	...
—		Ratio per 1,000 of Strength.		Deaths in Hospital.																											
1st Quarter...	...	210.59	1.11	0.47	31.99	1	1	...	1	...	3	...	...	1	4	...	1	3	...	...	1	2	2	1	...	...	...	...	...	1	6
2nd do. ...	...	223.72	2.04	0.50	29.72	...	1	...	...	1	5	2	...	...	5	...	1	1	...	3	9	4	3	1	...	...	...	...	...	1	15
3rd do. ...	...	218.84	1.45	0.57	30.19	...	...	...	...	...	3	1	1	...	6	...	2	1	...	4	2	1	1	2	...	...	...	...	...	1	11
4th do. ...	...	223.64	1.82	0.80	33.47	...	1	...	...	...	3	4	...	...	6	...	2	3	...	2	4	4	5	1	...	...	...	...	...	...	12
For the year	...	833.20	6.44	1.85	31.34	1	3	...	1	2	14	7	1	2	21	...	6	8	1	9	16	11	11	5	...	...	...	1	...	8	44
Ratio per 1,000 of Strength for the year ...	0.03	0.11	...	0.03	0.07	0.54	0.27	0.03	0.07	0.81	...	0.23	0.30	0.03	0.34	0.61	0.42	0.42	0.19	...	...	0.03	...	...	...	...	...	...	...	0.11	1.63

III.

Table showing Sickness and Mortality among the Native Troops at each Station of the Madras Presidency during the year 1873.

Stations.	Average Strength.	Total Admissions.	Average Daily Sick.	Deaths in Hospital.	Deaths out of Hospital.	Ratio per 1,000 of Strength.			
						Admissions.	Average Daily Sick.	Deaths in Hospital.	Deaths out of Hospital.
Madras	2,036	1,704	57.51	9	5	836.93	28.24	4.42	2.40
St. Thomas' Mount	135	33	0.71	2	...	244.44	5.25	14.81	...
Mayaram	429	422	24.36	7	3	983.68	56.78	16.31	6.99
Chennai	646	357	12.31	4	1	552.63	19.05	6.19	1.54
Vizagapatam ...	622	519	34.25	5	...	834.40	55.06	8.03	...
Vizianagrum ..	632	1,078	40.94	5	1	1705.69	64.77	7.91	1.58
Berhampore ...	366	320	8.50	2	...	874.31	23.22	5.46	...
Cuttack	656	270	18.17	1	2	411.58	27.69	1.52	3.04
Sumbulpore ...	325	334	11.98	...	...	1027.69	36.86	...	...
Bangalore	2,080	1,734	55.47	19	5	833.65	26.66	9.13	2.40
French Rocks ...	579	520	10.34	7	...	898.10	17.85	12.08	...
Mysore	63	79	1.30	...	...	1253.96	20.63	...	...
Mercara	549	641	20.99	4	2	1167.57	38.23	7.28	3.64
Bellary	1,548	739	31.27	5	4	477.39	20.20	3.22	2.58
Trichinopoly ...	1,883	2,052	48.41	7	3	1089.75	25.70	3.71	1.59
Quilon	606	139	5.69	5	...	229.37	9.38	8.25	...
Trichoor	169	63	2.88	...	...	372.78	17.04	...	...
Trovandrum ...	85	45	1.19	...	...	529.41	14.0	...	...
Palamcottah ...	563	773	17.58	3	...	1373.00	31.22	5.32	...
Cannanore	1,280	308	11.60	1	4	240.02	9.06	0.78	3.12
Mangalore	649	350	11.48	4	2	539.28	16.14	6.16	3.08
Secunderabad ...	3,239	3,520	122.02	20	6	1086.75	37.67	6.17	1.85
Kamptee	1,203	1,394	43.14	13	3	1158.76	35.86	10.80	2.49
Sectabuldee ...	426	1,277	56.57	1	2	2997.65	132.79	2.34	4.69
Hooshungabad ...	374	301	8.33	3	1	804.81	23.60	8.02	2.67
Raepore	636	395	13.28	3	...	621.06	21.03	4.71	...
Chandah	76	144	3.23	...	...	1894.73	42.5	...	...
Seroncha	144	230	5.19	2	...	1597.22	36.04	13.38	...
Rangoon	1,733	656	36.97	18	2	373.53	21.33	10.38	1.15
Thayetmyo	538	277	11.70	7	1	471.08	19.89	11.90	1.69
Tonghoo	510	635	22.54	4	1	1245.09	44.19	7.84	1.96
Moulmein	521	806	26.12	1	...	1547.02	50.13	1.91	...
Shoaygheen ...	118	163	4.88	1	...	1381.35	41.35	8.47	...
Port Blair	267	270	8.09	3	...	1011.23	30.29	11.23	...
Nicobars	37	268	5.08	...	...	7243.24	137.29	...	...
Akyab	127	59	17.23	1	...	464.56	135.66	7.87	...
Total	25,900	22,875	811.90	167	48	883.20	31.34	6.44	1.85

IV.

Table showing the Principal Diseases which have contributed to make up the Admissions into Hospital among the Native Troops at each Station during 1878.

Stations.	Admissions from																									Total.			
	Small-pox.	Dengue.	Typhus Fever.	Typhoid Fever.	Continued Fever.	Intermittent Fever.	Remittent Fever.	Cholera.	Rheumatism.	Pneumonia.	Scurvy.	Atrophy and Anemia.	Dropsies.	Stroke and Apoplexies.	Heart Disease.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Disease.	Spleen Disease.	Venereal Disease.	Abscesses.	Skin Disease.	Delirium Tremens.	Violence and Accidents.		All other Diseases.		
Madras	3	190		1	88	283			129	2		12	2	1	6	60	53	81	3	8	54	48	381		66	233	1,704		
Saint Thomas' Mount						9			3	2		5	7		2	15	14	23	1		21	9	81		16	113	422		
Palaveram	4	13			8	63	1		26	1						7	9	14			11	10	9		34	88	357		
Vellore	2					120			17	3		1				7	9	14			9	84	146		18	115	619		
Vizagapatam		8				85			41			12				21	20	5		1	9	2	10	166		21	145	1,078	
Vizianagaram	2	369				255			40				3		2	16	16	21	1		2	10	13	40		21	55	320	
Berhampore		23				101			27							3	14	14	1		7	17	13	32		1	63	270	
Cuttack						34			26	5					2	40	13	7	4		10	8	26		1	108	307	1,734	
Sumbulpore						146			20	1						10	15	7			36	50	225		21	69	384	270	
Bangalore	107	343				218	8		88	8	1	5				49	32	27	6	1	36	60	225		103	807	1,734		
French Rocks	7	89		1		147			13	1					4	9	2	14			47	6	47		23	68	520	270	
Mysore		40			2	25										3				1	3	2	3		1	78	78	4	
Mercara	2					189			38				8			35	36	69			7	18	98		70	78	641	78	
Bellary	8	21		1	96	83	2		61	5			2		4	23	23	23	2		17	23	98		67	183	738	183	
Trichinopoly	128	635			1	449			68	3		6	3		4	45	59	53	2	2	32	26	184		83	270	2,652	270	
Quilon					19				8	3					1	10	2	1			4	7	89		5	87	139	139	
Trichoor						12			6							6	2	1			4	8	5		8	13	63	63	13
Trevandrum						11			3							1	1	1				3	3		7	45	45	7	45
Palamootah		554			10	31			14	3		2				25	16	5				7	33		21	40	773	40	773
Cannanore	2				20	18			11	4		2			3	15	14				10	19	76		25	88	308	88	
Mangalore	2				82		5		15	2		2			1	17	23				5	13	75		13	77	350	77	
Secunderabad	10				250	1,611	12		197	20		3	2		7	141	61	62	7	19	43	84	303		233	415	3,520	415	
Kamptee	9	552			101	255			41	3	2	3			5	32	15	15	4		13	18	86		43	208	1,394	208	
Seetabuldee	17	588				307			57	1					21	21	14	3	2		12	6	63		25	134	1,277	134	
Hoshungabad	3				76	108	19		13						1	10	2				1	2	23		15	34	801	34	801
Raeppore	2					179	6		18			4				2	21	6			7	6	43		16	86	396	86	396
Chandah						76			10								8				3	6	12		10	19	144	144	144
Seronoha					1	73			16			5				2	8	8			2	27	27		11	77	290	77	290
Rangoon					2				38	3		4	21	1	8	45	44	54		2	28	1	59		59	167	656	167	656
Thayetmyo						73		1	27			4			2	14	22	10	2	3	8	1	59		20	85	277	85	277
Tonghoo						223			39	3		2			4	87	63			12	1	80		68	91	355	91	355	
Moulmein						258			82	2		11	6		16	90	31			3	18	7	80		68	91	355	91	355
Shoayghen						82			12							6	3			3	13	1	80		17	163	80	163	80
Port Blair						169			17			1				15	2	4	1	9	8	1	27		17	26	270	26	270
Nicobars						238	13		9			1				15	2	4	1			1	27		7	17	263	17	263
Akyab						35			9				3			1	1	1					2		1	8	59	8	59
Total	308	3,424		3	863	6,147	72	1	1,230	78	3	80	63	2	83	725	724	653	43	46	410	451	2,711	8	1,263	3,481	22,875	8	22,875

V.

Table showing the Principal Diseases which have contributed to make up the Deaths in Hospital among the Native Troops at each Station during 1873.

Stations.	Small-pox.	Dengue.	Typhus Fever.	Typhoid Fever.	Continued Fe- ver.	Intermittent Fever.	Remittent Fe- ver.	Cholera.	Rheumatism.	Phtisis Pulmonalis.	Scurvy.	Atrophy and Anemia.	Dropsies.	Stroke and Apoplexies.	Heart Diseases.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Dis- eases.	Spleen Dis- eases.	Veneral Dis- eases.	Abscesses.	Skin Diseases.	Delirium Tre- mens.	Violence and Accidents.	All other Dis- eases.	Total.	
Madras ...	1	3	..	1	2	14	7	1	2	21	6	8	1	1	9	16	11	11	6	..	..	..	1	..	..	44	167	
Saint Thomas' Mount	..	..	..	..	..	..	..	..	..	1	..	1	1	1	..	..	2	..	..	..	..	..	..	..	..	..	2	6
Palaveram	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	1	2
Vellore ...	..	..	..	..	..	1	..	..	1	1	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	1	4
Vizagapatam	..	..	..	..	..	..	..	..	1	2	1	..	..	..	..	..	1	1	1	..	..	..	..	..	..	..	1	4
Vizianagrum	..	..	..	..	..	3	..	..	..	1	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	1	5
Berhampore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	1	2
Cuttack	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	2	1	..	..	..	..	..	..	..	..	1	9
Sumbulpore	..	..	..	..	1	3	2	..	..	1	..	..	..	..	1	6	1	1	..	..	..	..	..	..	..	..	1	1
Bangalore	..	1	..	1	..	1	..	..	..	1	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	2	7
French Rocks	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	1	4
Mysore ...	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	1	5
Mercara	..	..	..	..	..	..	1	..	..	1	..	..	..	..	1	1	1	1	2	1	..	..	1	..	..	..	2	6
Bellary ...	..	1	..	..	..	1	..	..	..	1	..	..	..	..	1	1	1	1	..	..	..	..	..	..	..	..	1	7
Trichinopoly	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	1	1	1	..	..	..	..	..	..	..	..	1	8
Quilon ...	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	1	1	1	..	..	..	..	..	..	..	..	1	9
Trichoor	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	1	1	1	..	..	..	..	..	..	..	..	1	10
Trevandrum	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	1	1	1	..	..	..	..	..	..	..	..	1	11
Palancottah	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	1	1	1	..	..	..	..	..	..	..	..	1	12
Cananore	..	..	..	..	..	1	3	..	..	1	..	2	..	..	1	3	1	1	1	1	..	..	..	..	..	..	1	13
Mangalore	..	1	..	..	..	1	..	..	..	6	..	..	..	..	1	3	1	1	1	1	..	..	..	..	..	..	1	14
Secunderabad	..	..	..	..	..	1	..	..	..	1	..	1	..	..	1	3	1	1	1	1	..	..	..	..	..	..	1	15
Kamptee	1	..	..	..	..	..	..	..	..	1	..	..	..	..	1	3	1	1	1	1	..	..	..	..	..	..	1	16
Seetabuldee	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	3	1	1	1	1	..	..	..	..	..	..	1	17
Hooshungabad	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	1	1	1	1	..	..	..	..	..	..	1	18
Raeppore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	1	1	1	1	..	..	..	..	..	..	1	19
Chandah	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	1	1	1	1	..	..	..	..	..	..	1	20
Seroncha	..	..	..	..	1	1	..	1	1	..	1	4	..	..	2	3	1	1	1	2	..	..	..	..	..	..	1	21
Rangoon	..	..	..	..	..	..	..	1	1	..	1	1	..	..	2	3	1	1	2	2	..	..	..	..	..	..	1	22
Thayetmyo	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	3	1	1	2	2	..	..	..	..	..	..	1	23
Tonghoo	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	1	1	2	2	..	..	..	..	..	..	1	24
Moulmein	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	1	1	2	2	..	..	..	..	..	..	1	25
Shoaygheen	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	1	1	2	2	..	..	..	..	..	..	1	26
Fort Blair	..	..	..	..	1	1	..	..	..	..	..	..	..	..	1	3	1	1	2	2	..	..	..	..	..	..	1	27
Nicobars	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	1	1	2	2	..	..	..	..	..	..	1	28
Akyab ...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	1	1	2	2	..	..	..	..	..	..	1	29
Total ...	1	3	..	1	2	14	7	1	2	21	6	8	1	1	9	16	11	11	6	..	..	1	..	..	8	44	167	

Table showing the Ratio per 1,000 of Strength of the Principal Diseases which have contributed to make up the Admissions into Hospital among the Native Troops at each Station during 1873.

Stations.	Small-pox.	Dengue.	Typhus Fever.	Typhoid Fever.	Continued Fe- ver.	Intermittent Fever	Remittent Fe- ver.	Cholera.	Rheumatism.	Phthisis Pul- monalis.	Scurvy.	Atrophy and Anemia.	Dropsies.	Stroke and Apoplexies.	Heart Diseases.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Dis- eases.	Spleen Dis- eases.	Veneral Dis- eases.	Abscesses.	Skin Diseases.	Delirium Tre- mens.	Violence and Accidents.	All other Dis- eases.	Total.		
Madras ...	1.47	98.32	...	0.49	48.22	188.99	...	...	63.31	0.98	...	5.89	0.98	0.49	2.94	29.46	28.48	39.78	1.47	1.47	26.52	23.57	187.18	...	32.41	114.44	886.98		
St. Thomas' Mount	...	...	...	...	...	66.66	...	...	22.22	14.81	...	...	...	...	4.66	14.81	7.40	7.40	7.40	...	...	22.22	22.22	37.08	...	...	244.44	244.44	
Palaveram	9.32	30.30	...	...	18.64	144.52	2.33	...	60.60	2.83	...	11.65	16.81	...	...	34.98	32.63	53.61	2.83	...	...	48.95	20.97	188.81	...	37.29	263.40	983.68	
Vellore ...	3.09	...	...	...	...	136.66	...	...	26.81	4.64	...	1.54	...	...	...	10.83	13.98	21.67	...	...	...	17.08	15.48	140.86	...	52.63	59.82	553.63	
Vizianagaram	...	12.86	...	...	...	403.48	...	...	66.91	6.43	...	19.29	...	...	8.16	39.56	32.15	8.08	...	1.60	...	14.47	54.66	234.72	...	28.94	184.98	894.40	
Vizianagaram	3.16	583.86	...	...	...	276.96	2.78	...	63.29	...	...	...	4.74	...	3.16	38.56	25.31	33.28	1.58	...	...	3.16	15.82	262.66	...	38.23	229.48	1706.69	
Berhampore	...	60.10	...	...	...	51.83	1.52	...	73.77	...	...	...	...	...	...	48.71	19.81	38.25	2.78	...	...	19.12	32.78	109.29	...	57.37	150.27	1874.81	
Cuttack ...	...	...	...	...	16.77	449.23	3.07	...	39.68	7.62	...	...	...	...	3.06	60.97	19.81	7.62	6.09	...	...	25.91	...	48.78	1.52	24.39	96.08	411.58	
Sunbulpore	...	...	...	...	...	404.23	3.07	...	61.63	3.07	...	...	...	...	2.88	30.77	16.15	21.54	...	...	30.77	24.61	80.0	...	64.61	212.30	1097.69		
Bangalore	51.44	112.02	...	...	53.31	104.87	3.84	...	43.80	3.84	0.48	2.40	1.44	...	2.88	30.77	16.15	21.54	...	0.43	17.30	24.04	108.17	...	49.52	147.59	833.65		
French Rocks	12.09	153.71	...	1.72	134.71	253.88	...	...	31.09	1.72	...	...	...	...	6.90	15.64	8.45	24.18	...	1.73	3.45	13.81	81.17	...	39.72	117.44	886.10		
Mysore ...	...	694.92	...	...	31.74	396.82	...	...	...	...	...	...	15.87	...	...	31.74	65.17	125.68	3.64	...	...	31.74	...	81.17	...	15.87	68.49	1253.96	
Mercara ...	3.64	...	...	...	...	444.26	...	...	60.10	...	...	...	14.57	...	1.88	33.75	14.85	14.21	1.29	...	12.76	32.78	169.89	...	127.68	143.89	1167.57		
Bellary ...	5.16	13.56	...	0.64	62.01	52.97	1.29	...	39.40	3.26	...	...	1.29	...	2.68	14.85	14.85	14.21	1.29	...	10.98	14.85	68.80	...	43.28	117.57	477.39		
Trichinopoly	67.97	387.22	...	...	0.53	238.44	...	...	35.11	1.06	...	3.18	1.59	...	3.13	23.83	31.83	27.61	1.06	1.06	16.91	13.80	97.71	0.53	44.02	143.85	1089.75		
Quilon ...	...	...	...	...	31.81	...	...	...	13.20	4.95	...	...	...	...	1.65	16.50	8.30	4.95	1.65	...	6.60	11.50	64.85	...	8.25	61.05	239.87		
Trichoor ...	...	...	...	...	...	71.006	...	...	29.58	...	...	...	...	...	...	29.58	11.80	5.91	...	...	23.67	47.84	29.58	...	47.84	76.92	872.78		
Trevandrum	...	...	...	...	...	129.80	...	...	35.39	...	...	...	...	...	...	11.80	11.80	23.53	...	...	...	35.29	86.23	...	86.23	118.0	539.41		
Palamcottah	...	984.01	...	...	17.76	55.06	3.55	...	26.86	5.82	...	3.55	...	...	1.77	44.40	28.41	8.98	3.55	...	12.43	14.20	56.83	...	37.30	171.04	1873.00		
Cannanore	1.56	...	...	...	15.63	14.06	0.78	...	8.59	8.12	...	1.56	...	...	2.84	11.70	10.98	...	...	...	7.81	14.84	59.37	...	19.53	68.76	240.63		
Mangalore	3.08	...	...	...	8.08	126.84	7.70	...	23.11	8.08	...	...	...	...	1.54	26.19	35.44	26.19	3.08	...	7.70	20.08	115.56	...	18.49	118.64	539.28		
Secunderabad	3.08	...	...	...	77.18	497.87	8.70	...	60.82	6.17	...	0.92	0.61	...	2.16	43.53	15.74	19.14	2.16	...	13.27	25.98	98.54	0.80	87.06	138.12	1086.75		
Kamptee ...	7.48	458.86	...	...	83.95	211.97	...	...	34.06	2.49	1.66	2.49	...	...	4.16	18.28	13.45	12.46	3.32	...	9.96	14.94	71.48	...	36.74	172.90	1163.76		
Seetabuldee	39.90	1380.28	...	...	...	720.65	...	...	133.80	2.84	...	...	...	...	49.29	49.29	32.86	7.02	4.68	...	30.51	14.08	159.62	...	58.68	314.55	2397.65		
Hooshungabad	8.02	...	...	...	208.20	275.40	50.80	...	34.75	...	...	...	...	...	2.67	26.75	5.34	...	...	...	2.67	5.34	58.82	...	40.10	80.90	804.81		
Raepore ...	3.14	...	...	...	...	281.44	7.86	...	23.30	...	...	6.28	...	...	...	8.14	38.01	9.42	...	...	11.00	9.42	67.61	...	26.15	135.23	631.06		
Chandah ...	...	...	...	...	...	1000.0	...	...	131.57	...	...	13.15	...	...	...	...	13.15	78.94	...	...	...	39.47	78.94	...	131.57	250.0	1894.73		
Seroneha ...	...	...	...	...	...	506.94	...	...	111.11	...	...	34.72	...	...	...	13.88	55.55	55.55	...	...	...	39.47	78.94	...	76.38	534.72	1597.23		
Rangoon ...	...	...	...	...	...	58.28	...	...	21.92	1.73	...	2.80	12.11	...	4.60	25.98	25.98	31.15	...	...	13.88	...	50.76	...	34.04	80.59	879.53		
Thayetmyo	...	...	...	...	1.15	124.15	...	...	46.91	...	...	...	...	...	8.40	23.80	37.41	17.00	3.40	...	5.18	13.60	1.96	50.76	...	34.01	59.52	471.08	
Tonghoo ...	...	...	...	...	...	447.05	...	...	76.47	5.88	...	3.92	...	...	3.92	7.84	170.58	129.41	...	...	8.92	23.62	1.96	58.82	...	133.33	178.43	1245.09	
Moulmein	...	...	...	...	...	495.20	...	...	157.38	3.88	...	31.11	11.51	...	...	30.71	172.74	59.50	...	...	5.75	34.53	13.43	153.55	...	78.69	809.02	1547.02	
Shoeygheem	...	...	...	...	...	694.91	8.47	...	101.69	...	...	...	...	...	...	56.17	60.84	25.43	...	...	...	8.47	101.69	...	...	144.06	220.33	1881.35	
Port Blair	...	...	...	...	...	632.95	...	...	63.97	...	...	3.74	...	...	...	56.17	60.84	25.43	...	...	...	8.47	101.69	...	...	26.21	68.67	1011.33	
Nicobars ...	...	...	...	...	162.16	6432.43	351.35	...	27.02	...	...	27.02	...	...	...	27.02	27.02	27.02	...	...	...	...	27.02	...	...	...	27.02	108.10	7243.24
Akyab ...	...	...	...	...	...	275.51	...	...	70.96	...	...	27.02	...	...	...	27.02	27.02	27.02	...	...	...	...	...	...	...	...	62.96	464.56	
Total	11.89	132.20	...	0.11	84.05	237.33	2.77	0.01	47.49	8.01	0.11	3.08	2.39	0.09	8.20	27.99	27.95	35.26	1.66	1.77	15.83	17.41	104.67	0.11	48.87	134.40	889.20		

VII.

Table showing the Ratio per 1,000 of Strength of the Principal Diseases which have contributed to make up the Deaths in Hospital among the Native Troops at each Station during 1873.

Stations.	Small-pox.	Dengue.	Typhus Fever.	Typhoid Fever.	Continued Fever.	Intermittent Fever.	Remittent Fever.	Cholera.	Rheumatism.	Phtisis Pulmonalis.	Scurvy.	Atrophy and Anæmia.	Dropsies.	Stroke and Apoplexies.	Heart Diseases.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Diseases.	Spleen Diseases.	Veneral Diseases.	Abscesses.	Skin Diseases.	Delirium Tremens.	Violence and Accidents.	All other Diseases.	Total.		
Madras ...	...	...	...	...	...	0.49	...	...	...	0.49	...	0.49	0.49	0.49	...	...	0.98	...	...	...	...	...	...	...	...	0.98	4.42		
St. Thomas' Mount	...	...	...	...	...	...	...	...	...	7.40	...	...	...	...	...	...	2.33	...	...	...	...	...	...	...	...	...	7.40	14.81	
Palaveram	...	...	...	...	...	...	...	...	2.33	2.33	...	...	...	...	...	...	2.33	...	...	...	...	...	...	...	...	...	6.99	16.31	
Vellore ...	...	...	...	...	...	1.54	...	...	...	3.09	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.54	6.19	
Vizagapatam	...	...	...	...	...	...	...	...	...	1.60	...	1.60	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4.82	8.03	
Vizianagrum	...	...	...	...	...	4.74	...	...	...	...	...	...	...	...	...	...	2.73	...	...	1.58	...	...	...	...	...	...	1.58	7.91	
Berhampore	...	...	...	...	...	...	...	...	...	2.73	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5.46	...
Cuttack ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.52	1.52	...
Sumbulpore	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bangalore	...	0.48	...	...	0.48	1.44	0.96	...	...	0.96	...	...	...	...	0.48	2.88	0.96	...	...	...	...	...	...	...	...	...	...	...	9.13
French Rocks	...	...	1.72	...	...	1.72	...	...	...	1.72	...	...	...	...	...	1.82	1.72	...	...	...	...	...	...	...	...	...	3.45	12.08	...
Mysore ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mercara	...	...	...	...	...	...	...	...	...	0.64	...	...	...	...	0.64	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bellary ...	...	...	...	...	...	...	0.64	...	...	...	...	...	...	...	...	1.92	...	...	...	...	...	...	...	...	...	...	...	...	...
Trichinopoly	...	0.53	...	...	...	0.53	...	...	...	1.65	...	...	...	...	1.65	1.65	...	...	...	0.64	...	...	...	...	...	...	...	...	...
Quilon ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Trichoor	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Trevandrum	...	...	...	...	...	...	...	...	...	1.77	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palamcottah	...	...	...	...	...	...	...	...	...	0.78	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cannanore	...	...	...	...	...	...	...	...	...	1.54	...	...	...	...	1.54	...	1.54	...	...	...	...	...	...	...	...	...	...	...	...
Mangalore	...	...	...	...	...	...	...	...	...	1.84	...	...	...	...	...	0.92	...	...	...	...	...	...	...	...	...	...	...	...	...
Secunderabad	...	...	...	...	...	0.30	0.92	...	...	...	...	0.83	0.60	...	...	2.49	...	...	...	...	...	...	...	...	...	...	...	...	...
Kamptee	...	0.83	...	...	...	0.83	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Seetabuldee	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hooshungabad	...	...	...	...	...	...	2.67	...	...	...	...	...	...	...	2.67	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Raepore...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chandah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Seroncha	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rangoon	...	...	...	...	0.57	0.57	...	...	...	...	...	6.94	2.30	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Thayetmyo	...	...	...	...	...	...	...	1.70	...	...	...	0.57	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tonghoo	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Monlmein	...	...	...	...	...	...	...	...	...	...	...	1.96	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Shoeygheen	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Port Blair	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nicobars	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Akyab ...	...	...	...	...	...	...	...	...	...	...	...	...	7.87	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total ...	0.08	0.11	...	0.08	0.07	0.54	0.27	1.03	0.07	0.81	...	0.23	0.30	0.08	0.34	0.61	0.42	0.42	0.19	...	...	...	0.03	...	0.11	1.69	6.44		

VIII.

Table showing the Number of Admissions and Deaths under Different Classes of Diseases among the Native Troops at each Station during the year 1873.

Stations.	General Diseases.		Local Diseases.		Condi- tions.		Poisons.		Injuries.		Surgical Opera- tions.		Not yet diagnosed.		No Ap- preciable Disease.	
	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.
Madras	751	4	853	5	29	...	3	...	66	...	...	...	2	...	...	...
St. Thomas' Mount	15	1	14	...	4	...	...	...	...	...	...	...	...	...	...	...
Palaveram	147	2	196	8	59	2	...	...	16	...	...	...	4	...	...	...
Vellore	151	3	162	1	9	...	1	...	84	...	...	...	...	...	...	...
Vinagapatam	204	4	276	1	21	...	...	...	18	...	...	...	...	...	...	...
Vizianagram	681	3	848	1	32	1	1	...	21	...	...	...	...	...	...	...
Berhampore	156	1	123	1	20	...	...	...	21	...	...	...	...	...	...	...
Cuttack	91	...	152	1	10	...	1	...	16	...	...	...	...	...	...	...
Sumbulpore	173	...	137	...	2	...	1	...	21	...	...	...	...	...	...	...
Bangalore... ..	927	9	603	9	83	...	4	...	103	1	...	...	10	...	4	...
French Rocks	350	4	128	3	19	...	...	...	23	...	...	...	...	...	...	...
Mysore	68	...	10	...	...	...	...	...	1	...	...	...	...	...	...	...
Mercara	250	...	313	4	7	...	1	...	70	...	...	...	...	...	...	...
Bellary	302	3	316	2	52	...	...	...	67	...	...	...	2	...	...	...
Trichinopoly	1,332	2	528	3	97	2	2	...	83	...	...	...	9	...	1	...
Quilon	39	1	87	4	7	...	1	...	5	...	...	...	...	...	...	...
Trichoor	17	...	37	...	1	...	...	...	8	...	...	...	...	...	...	...
Trevandrum	14	...	23	...	1	...	...	...	7	...	...	...	...	...	...	...
Palamcottah	622	1	120	1	8	1	...	...	21	...	...	...	1	...	1	...
Cannanore	85	1	167	...	29	...	...	...	25	...	...	...	2	...	...	...
Mangalore... ..	118	1	205	3	12	...	3	...	12	...	...	...	...	...	...	...
Secunderabad	2,169	12	987	7	68	1	3	...	282	...	...	...	10	...	1	...
Kamptee... ..	967	6	342	6	31	1	1	...	43	...	...	...	10	...	...	...
Seetabuldee	989	1	244	...	4	...	3	...	25	...	...	...	12	...	...	...
Hoosungabad	215	1	63	1	6	...	...	...	15	1	...	...	2	...	...	...
Raspoore	211	...	148	1	20	1	...	...	16	1	...	...	...	...	...	...
Chandah	91	...	42	...	1	...	...	...	10	...	...	...	...	...	...	...
Seroncha	110	1	100	1	4	...	5	...	11	...	...	...	...	...	...	...
Rangoon	191	8	362	6	34	4	1	...	59	...	1	...	6	...	2	...
Thayetmyo	105	1	136	4	11	2	...	...	20	...	...	...	4	...	1	...
Tonghoo	282	1	264	3	16	...	3	...	68	...	...	...	1	...	1	...
Moulmein	380	...	360	1	21	...	...	...	41	...	...	...	4	...	...	...
Shoaygheen	95	...	49	1	2	...	...	...	17	...	...	...	...	...	...	...
Port Blair... ..	187	1	74	2	1	...	...	...	7	...	...	...	1	...	...	...
Nicobars	259	...	7	...	1	...	...	...	1	...	...	...	...	...	...	...
Akyab	47	1	4	...	8	...	...	...	...	...	...	...	...	...	...	...
Total	12,791	73	7,975	75	780	16	84	...	1253	8	1	...	80	...	11	...

IX.

Table showing the Admissions and Deaths under Different Order of Diseases among the Native Troops at each Station during the year 1873.

Stations.	General Diseases.						Local Diseases.																			
	Sub-Division A.		Sub-Division B.		Diseases of the Eye.		Diseases of the Ear.		Diseases of the Nose.		Diseases of the Circulatory System.		Diseases of the Absorptive System.		Diseases of the Digestive System.		Diseases of the Urinary System.		Diseases of the Generative System.		Diseases of the Organs of Locomotion.		Diseases of the Cellular Tissue.		Diseases of the Cutaneous System.	
	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.
	571	9	180	3	54	2	24	1	6	3	60	2	199	3	29	18	9	61	3	371	5					
Madras	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Saint Thomas' Mount.	93	6	54	2	12	11	1	1	2	15	2	61	3	11	...	...	...	10	...	81	...					
Palaveram	122	2	29	2	12	2	...	...	...	...	7	...	...	...	...	...	...	3	...	91	...					
Vellore...	93	...	111	4	12	4	...	...	...	...	21	...	...	...	...	...	...	34	...	146	...					
Vizagapatam	627	3	54	...	17	...	...	...	...	...	25	...	...	...	...	...	...	11	...	166	...					
Vizianagaram	124	...	32	1	7	...	...	...	...	...	16	...	...	...	...	...	...	13	...	40	...					
Berhampore	46	...	45	...	8	...	...	...	...	...	10	...	...	...	...	...	...	...	...	32	...					
Cuttack	147	...	26	...	43	...	...	...	...	...	49	...	...	...	...	...	...	8	...	26	...					
Sumbulpore	798	7	129	2	92	16	...	...	...	...	35	...	...	...	...	...	...	52	...	226	...					
Bangalore	323	2	27	2	19	10	...	...	...	...	9	...	...	...	...	...	...	8	...	47	...					
French Rock	67	...	61	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	2	...					
Mysore...	199	...	51	...	...	...	...	...	...	...	35	...	...	...	...	...	...	...	...	93	...					
Mercara	212	1	90	2	40	18	...	...	...	...	23	...	...	...	...	...	...	20	...	98	...					
Bellary	1,215	2	117	...	54	20	...	...	...	...	44	...	...	...	...	...	...	23	...	184	...					
Trichinopoly	...	...	...	...	...	...	...	...	...	...	10	...	...	...	...	...	...	27	...	...	...					
Quilon ...	19	...	20	1	1	4	...	...	...	...	1	...	...	...	...	...	...	7	...	89	...					
Trichoor	12	...	5	...	1	3	...	...	...	...	5	...	...	...	...	...	...	8	...	5	...					
Trevandrum	11	...	3	...	1	2	...	...	...	...	1	...	...	...	...	...	...	3	...	7	...					
Palamcottah	597	...	25	1	7	4	...	...	...	...	25	...	...	...	...	...	...	8	...	32	...					
Cannanore	41	...	44	1	7	8	...	...	...	...	15	...	...	...	...	...	...	19	...	76	...					
Mangalore	92	...	26	1	13	1	...	...	...	...	17	...	...	...	...	...	...	27	...	75	...					
Secunderabad...	1,891	4	278	8	90	43	...	...	...	...	141	...	...	...	...	...	...	96	...	303	...					
Kamptee	901	3	66	3	87	7	...	...	...	...	22	...	...	...	...	...	...	26	...	...	...					
Seetabuldee	920	1	69	...	62	1	...	...	...	...	21	...	...	...	...	...	...	6	...	...	...					
Hoosungabad	202	1	13	...	19	7	...	...	...	...	10	...	...	...	...	...	...	7	...	...	...					
Kaepore	188	...	23	...	36	...	...	...	...	...	2	...	...	...	...	...	...	2	...	...	...					
Chanda	76	...	15	...	7	...	...	...	...	...	2	...	...	...	...	...	...	6	...	...	...					
Seroncha	75	...	35	1	20	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
Rangoon	103	2	88	6	11	16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
Thayetmyo	74	1	31	...	8	3	...	...	...	...	45	...	...	...	...	...	...	1	...	...	...					
Tonghoo	229	...	53	1	13	7	...	...	...	...	14	...	...	...	...	...	...	2	...	...	...					
Moulmein	269	...	121	...	25	28	...	...	...	...	4	...	...	...	...	...	...	9	...	...	...					
Shoayghoon	83	...	12	...	1	2	...	...	...	...	16	...	...	...	...	...	...	13	...	...	...					
Port Blair	169	1	18	...	4	2	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...					
Nicobars	267	...	2	...	1	...	...	...	...	...	15	...	...	...	...	...	...	...	...	...	...					
Akyab	35	...	12	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...					
Total ...	10,880	80	1,911	43	777	273	120	6	83	9	724	16	2,233	87	226	140	148	508	1	2,702	...					

IX.—(Continued.)

Table showing the Admissions and Deaths under Different Order of Diseases among the Native Troops at each Station during the year 1873.

Stations.	Injuries.																			
	Conditions.		Poisons.		Battle.										Surgical Operations.		Not yet Diagnosed.		No Appreciable Disease.	
	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.		
Madras	29	3					66									2				
Saint Thomas' Mount	4	1																		
Palaveram	59	2					16									4				
Vellore	9	1					34													
Vizagapatam	21						18													
Vizianagaram	32	1	1				20					1								
Berhampore	20						21													
Cuttack	10	1					15					1								
Sumbulpore	2	1					21													
Bangalore	83	4					101	1				2			10		4			
French Rocks	19						23													
Mysore... ..							1													
Mercara... ..	7	1					70													
Bellary	52						67								2					
Trichinopoly	97	2	2				80					3			9		1			
Quilon	7	1					5													
Trichoor	1						8													
Trevandrum	1						7													
Palamcottah	8	1					21								1		1			
Cannanore	29						25								2					
Mangalore	12	3					12													
Secunderabad	68	1	3				282								10		1			
Kamptee... ..	31	1	1				43								10					
Seetabuldee... ..	4	3					25								12					
Hoosungabad	6						15	1							2					
Raepore... ..	20	1					16	1												
Chanda	1						10													
Seroncha... ..	4	5					11													
Rangoon	34	4	1				59						1		6		2			
Thayetymo	11	2					20								4		1			
Tonghoo	16	3					66					2			1		1			
Moulmein	21						41								4					
Shoaygheen	2						17													
Port Blair	1						7								1					
Nicobars	1						1													
Akyab	8																			
Total ...	780	1634					1,244	3				9	1		80		11			

JAIL RETURNS.

I.

Table showing the Increase and Decrease among the Jail Population in the Presidency of Madras during the year 1873.

Jails.	Remained 31st December 1872.	Increase.			Decrease.								Remaining 31st December 1873.
		Incarcerated during 1873, and transferred from other Jails.	Other Causes of Increase.	Total Increase.	Liberated during 1873.	Transferred to other Jails.	Transferred beyond Sea.	Escaped.	Deaths.			Total Decrease.	
									In Hospital.	Out of Hospital.	Executed.		
EUROPEAN PRISON.													
Ootacamund ...	25	16	...	16	19	2	...	...	...	...	...	21	20
CENTRAL JAILS.													
Cannanore ...	568	215	...	215	146	1	...	...	11	...	...	158	625
Coimbatore ...	995	401	...	401	238	31	...	...	44	...	6	369	1,027
Rajahmundry ...	839	321	...	321	301	16	...	...	16	...	...	333	827
Salem ...	526	906	...	906	705	120	...	...	15	...	2	842	590
Trichinopoly ...	940	448	...	448	329	30	...	...	56	...	...	415	973
Vellore ...	979	274	...	274	242	31	...	...	10	...	...	283	970
DISTRICT JAILS.													
Bellary ...	349	1,091	...	1,091	835	204	...	...	5	...	9	1,053	387
Berhampore ...	212	396	...	396	431	41	...	...	10	...	2	484	124
Calicut ...	109	651	...	651	462	139	...	...	2	...	5	608	152
Chingleput ...	126	490	...	490	331	129	...	...	...	...	1	461	155
Chittoor ...	216	838	...	838	725	117	...	...	1	...	6	849	205
Coimbatore ...	123	581	...	581	424	68	...	...	20	...	1	513	191
Cuddalore ...	321	898	...	898	742	148	...	...	5	...	...	895	324
Cuddapah ...	194	1,146	...	1,146	779	269	...	...	6	...	4	1,058	282
Guindy ...	65	46	...	46	47	...	...	...	...	...	...	47	64
Guntoor ...	87	518	...	518	356	124	...	...	1	...	3	484	121
Kurnool ...	103	380	...	380	303	40	...	...	5	...	4	352	131
Madura ...	270	1,093	...	1,093	945	142	...	...	5	...	1	1,093	270
Mangalore ...	109	552	...	552	417	119	...	...	2	...	...	538	123
Masulipatam ...	30	129	...	129	132	1	...	...	...	...	...	133	26
Nellore ..	179	654	...	654	496	90	...	...	2	...	2	590	243
Native Jail,													
Ootacamund ...	114	247	...	247	138	55	...	1	1	...	...	195	166
Paumben* ...	89	13	...	13	24	78	...	...	...	...	...	102	...
Rajahmundry ...	94	660	...	660	541	117	...	...	1	...	4	663	91
Russelcondah ...	82	217	...	217	197	5	...	...	...	...	...	202	97
Tanjore ...	149	454	...	454	397	89	...	...	8	...	2	496	107
Tellicherry ...	55	392	...	392	335	68	...	...	1	...	1	405	42
Tinnevely or													
Palamcottah ...	278	855	...	855	676	223	...	...	6	...	10	915	218
Tranquebar ...	111	620	...	620	419	148	...	...	8	...	...	575	156
Trichinopoly ...	93	355	...	355	330	29	...	...	3	...	6	368	80
Vizagapatam ...	276	1,136	...	1,136	959	126	...	2	16	...	5	1,108	304
Penitentiary,													
Madras ...	575	2,587	...	2,587	2,373	154	10	...	3	1	...	2,547	615
Cochin ...	...	9	...	9	9	...	...	...	...	...	...	9	...
Total ...	9,281	19,589	...	19,589	15,859	2,954	10	3	263	1	74	19,164	9,706

* Abolished 19th May 1873.

II.

Table showing the Sickness and Mortality among the Jail Population of the Madras Presidency during the year 1873, and the Prevalence of the Principal Diseases in each month of the year.

Months.	Admissions into Hospital.										Deaths in Hospital.																			
	Average Strength.	Total Admissions.	Total Deaths.	Average Daily Sick.	Small-pox.	Chicken-pox.	Typhus Fever.	Typhoid Fever.	Continued Fever.	Intermittent Fever.	Remittent Fever.	Cholera.	Rheumatism.	Phthisis Pulmonalis.	Scurvy.	Atrophy and Anæmia.	Dropsies.	Apoplexy.	Heart Diseases.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Spleen Diseases.	Veneral Diseases.	Drunkenness.	Abcesses.	Skin Diseases.	Wounds and Accidents.	All other Causes.	
January	9,079	449	23	238-43	3	2	...	...	42	75	...	1	15	1	...	7	7	2	1	1	28	21	40	...	19	8	23	55	25	74
February	9,114	430	20	233-89	3	8	...	...	44	55	...	...	8	2	...	8	3	...	...	...	22	24	39	2	13	14	21	56	25	87
March	9,016	482	17	221-09	1	18	...	...	53	60	...	1	23	1	...	4	5	1	...	...	18	33	28	1	18	22	21	70	32	77
April	9,006	480	17	232-58	2	10	...	...	51	44	...	2	19	...	...	6	2	...	...	15	34	26	1	14	27	20	79	24	73	
May	9,072	463	20	238-25	1	5	...	...	40	41	...	1	16	...	1	9	6	...	1	1	16	31	26	1	31	29	27	84	32	61
June	9,243	412	19	235-55	...	...	...	...	46	44	...	...	15	...	...	7	2	...	...	1	11	34	33	1	14	27	27	64	21	64
July	9,363	478	22	237-83	1	...	...	...	47	54	...	...	10	...	...	8	8	...	2	2	16	54	36	4	21	17	22	79	21	70
August	9,371	519	27	258-28	1	3	...	...	40	56	...	...	14	...	3	6	9	...	1	5	15	48	65	...	18	12	20	84	27	96
September	9,271	467	25	252-77	1	2	...	...	20	66	...	...	10	...	...	6	6	...	3	8	14	50	48	...	22	8	18	81	20	84
October	9,397	421	26	242-75	...	...	...	...	21	64	...	...	18	...	...	5	1	...	3	8	18	45	30	...	22	8	14	70	20	88
November	9,520	476	19	260-52	...	...	...	...	32	77	...	...	14	...	...	9	12	...	...	...	19	48	44	...	27	3	17	69	23	80
December	9,655	502	28	268-66	2	2	...	...	34	74	...	...	14	...	...	7	8	...	3	...	22	41	32	1	26	7	22	110	31	63
For the year.	9,256	5,549	262	241-30	15	43	...	...	470	700	12	4	176	14	6	79	74	7	20	214	463	447	11	241	182	252	901	301	917	...
Ratio per 1,000 of strength for the year ...				...	1-62	4-64	...	...	50-81	75-67	1-29	0-43	19-02	1-51	0-64	8-54	8-00	0-75	2-16	23-13	50-05	48-32	1-18	26-05	19-67	27-24	97-40	32-54	99-14	...

Months.	Ratio per 1,000 of Strength.		Ratio per 1,000 of strength for the year.	
	...	...	...	...
January	49-45	25-71	2-53	5
February	47-18	25-66	2-19	4
March	53-46	24-52	1-88	7
April	49-96	25-82	1-88	6
May	51-03	25-15	2-20	6
June	44-57	24-40	2-05	6
July	51-05	25-40	2-34	4
August	55-98	27-85	2-91	4
September	50-37	27-26	2-69	6
October	44-80	25-83	2-66	6
November	50-00	27-36	1-99	3
December	51-99	27-82	2-90	5
For the year	509-89	28-32	26-08	5
Ratio per 1,000 of strength for the year. 0-10				
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IV.

Table showing the Prevalence of Cholera at each Jail of the Madras presidency in each month of the year 1873.

Jails.	Average Strength for the year.	Number of Admissions and Deaths in each Month.																Total Admissions.	Total Deaths.	Ratio per 1,000 of Strength.								
		January.		February.		March.		April.		May.		June.		July.		August.				September.		October.		November.		December.		
		A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.			A.	D.	A.	D.	A.	D.	A.	D.	Admis- sions.	Deaths.
European Prison, Ootacamund ...	21																											
Central Jails.																												
Coimbatore ...	980	*1				*1		*1	*1	*1															4	1	4.08	1.02
Vellore ...	951																											
Trichinopoly ...	983																											
Rajahmundry ...	831																											
Cannanore ...	582																											
Salem ...	568																											
District Jails.																												
Penitentiary Madras	557																											
Bellary ...	868																											
Cuddalore ...	810																											
Visagapatam ...	287																											
Cuddapah ...	260																											
Madura ...	258																											
Palamcottah ...	249																											
Chittoor ...	200																											
Nellore ...	166																											
Coimbatore ...	152																											
Ootacamund Native	144																											
Tanjore ...	138																											
Berhampore ...	132																											
Calicut ...	129																											
Chingleput ...	129																											
Tranquebar ...	124																											
Mangalore ...	119																											
Kurnool ...	105																											
Guntoor ...	99																											
Rajahmundry ...	96																											
Russelcondah ...	91																											
Trichinopoly ...	80																											
Guindy ...	62																											
Tellicherry ...	55																											
Masulipatam ...	37																											
Paumbum ...	34																											
H. M.'s Jail Madras	33																											
Total ...	9,250	1				1		1	1	1															4	1	0.43	0.10

* Choleraic Diarrhoea.

V.
Table showing the General Statistics of Sickness and Mortality at each Jail of the Madras Presidency, and the Average Number of Daily Sick per 1,000 of Strength in each month of the year 1873.

Jails.	Average Strength for the year.	Daily sick per 1,000 of Strength in each month.												Daily Sick per 1,000 of Average Strength for the year.	Admitted into Hospital per 1,000 of Average Strength.	Died per 1,000 of Average Strength	
		January.	Feb.	March.	April.	May.	June.	July.	August.	Sep.	October.	Nov.	Dec.			Cholera.	All Causes.
European Prison Ootacamund	21	...	...	...	9.52	9.04	...	...	21.79	19.34	16.19	17.17	12.37	19.5	288.77	1.02	42.85
Central Jails.																	
Coimbatore	980	18.06	19.41	13.51	25.80	25.86	22.90	21.47	21.79	19.34	16.19	17.17	12.37	19.5	288.77	1.02	42.85
Vellore	951	26.95	28.28	21.83	22.01	12.04	10.86	13.38	18.14	14.10	7.97	13.67	21.31	17.59	689.80	...	9.16
Trichinopoly	933	17.95	20.73	20.42	22.71	19.94	19.67	22.27	21.42	23.72	26.06	25.27	27.65	22.58	338.69	...	60.02
Rajahmundry	831	27.10	29.38	30.00	33.52	36.33	41.47	43.81	35.25	49.30	42.29	45.51	50.85	38.71	802.64	...	19.25
Cannanore	582	22.28	18.67	19.58	19.75	16.40	21.16	26.82	28.00	23.62	20.15	20.39	19.77	21.12	225.08	...	18.90
Salern	568	16.30	6.26	20.27	10.53	14.45	15.81	14.02	18.13	10.21	11.49	12.31	13.46	13.57	322.18	...	26.40
District Jails.																	
Penitentiary Madras	557	24.57	29.08	29.54	38.67	37.60	23.80	32.75	56.73	45.16	47.05	47.26	41.48	37.82	743.26	...	5.38
Bellary	363	21.39	17.00	15.53	15.44	11.16	14.24	11.16	6.11	18.35	14.81	11.70	27.08	15.31	374.65	...	13.77
Cuddalore	310	23.10	29.61	18.47	17.01	28.67	34.25	32.67	34.81	30.73	28.79	38.56	28.07	28.54	754.83	...	16.12
Vizagapatam	267	40.83	31.56	36.65	24.01	14.34	17.40	13.58	13.61	8.62	19.11	18.45	18.69	21.27	262.17	...	59.92
Cuddapah	260	44.22	33.11	47.10	49.05	36.03	17.14	25.86	23.08	21.16	11.31	27.57	33.20	29.53	1019.23	...	23.07
Madura...	258	12.86	9.96	10.60	6.83	12.29	15.93	10.45	11.27	8.36	12.19	17.30	18.26	12.17	329.45	...	19.37
Palamcottah	249	23.66	19.23	13.51	13.78	14.82	13.46	14.52	7.04	3.93	9.61	3.96	5.34	12.08	265.06	...	21.09
Chittoor	200	31.72	45.33	62.18	41.27	58.89	42.05	44.41	64.35	66.25	59.89	53.48	56.76	52.5	1335.0	...	5.0
Nellore	166	35.28	28.59	16.71	20.52	17.16	21.28	21.79	40.18	37.93	37.44	33.45	35.89	29.75	630.60	...	12.04
Coimbatore	152	81.44	68.68	54.01	90.17	82.08	70.91	57.72	40.56	52.72	43.98	68.31	65.72	63.18	993.42	...	131.57
Ootacamund Native	144	13.26	3.24	6.83	5.36	10.08	18.32	24.03	16.78	8.84	20.67	7.40	6.17	12.22	361.11	...	6.91
Tanjore...	133	33.46	22.56	22.22	18.34	26.11	36.61	32.96	54.08	39.72	42.70	44.76	37.96	34.51	458.64	...	60.15
Berhampore	132	29.68	41.92	40.13	48.55	43.12	28.58	25.62	30.00	56.00	30.93	27.11	31.15	35.90	825.75	...	75.75
Calicut	129	27.55	30.98	17.7	22.19	17.79	17.64	28.01	27.38	31.40	22.69	24.78	19.36	23.56	875.96	...	15.50
Chingleput	129	28.84	28.46	28.88	15.88	13.72	26.79	14.18	10.29	21.12	24.96	28.91	33.81	23.25	906.97	...	...
Tanquebar	124	53.78	47.47	27.71	45.09	63.86	54.18	28.41	32.14	30.22	44.79	22.91	29.20	38.95	1064.51	...	64.51
Mangalore	119	48.36	40.17	20.91	24.05	22.03	41.83	51.13	57.07	56.37	68.92	57.76	22.16	43.10	1596.63	...	16.80
Kurnool	105	35.61	32.42	37.52	41.11	52.59	59.52	53.42	53.54	58.92	47.04	42.24	27.43	44.95	1657.14	...	47.61
Guntoor	99	21.87	34.09	41.66	23.33	16.52	37.97	7.14	10.86	37.87	32.00	44.57	40.94	29.59	858.58	...	30.30
Rajahmundry	96	41.38	51.56	32.78	25.65	16.79	41.09	60.74	61.68	65.00	31.61	61.33	64.00	48.33	822.91	...	10.41
Russelcondah	91	40.42	66.84	35.50	20.95	18.00	2.82	15.19	27.64	2.82	16.59	23.82	13.91	22.30	879.12	...	...
Trichinopoly	80	34.11	20.12	33.69	46.35	40.42	45.23	36.63	42.97	47.21	37.83	59.72	44.43	40.37	662.5	...	37.5
Guindy...	62	11.90	12.5	24.59	19.23	15.62	12.71	21.18	21.18	11.90	36.29	30.17	38.46	21.45	967.74	...	18.18
Tellicherry	55	13.72	62.00	27.91	11.77	15.60	14.53	28.00	39.25	28.30	11.29	10.69	8.75	22.18	672.72	...	...
Masulipatam	37	17.85	15.15	89.74	50.00	85.10	41.66	71.42	85.36	83.33	107.14	118.26	111.11	69.72	2000.0	...	...
Pambun	34	43.33	42.40	45.97	47.61	36.00	9.23	9.11	5.94	Closed.	23.23	79.5	10.00	104.41	1852.94	...	...
Her M.'s Jail Madras	33	9.6	2.70	17.00	28.21	37.10	9.23	9.11	5.94	7.02	23.23	79.5	10.00	17.57	1121.21	...	...
Total	9,260	25.23	25.28	23.90	25.14	24.67	24.38	25.71	27.92	27.32	26.24	28.16	29.04	26.08	519.89	0.10	28.32

VI.

Table showing the Admissions, Deaths and Daily Sick among each class of Prisoners in the Madras Presidency, during the year 1873.

Jails.	Convicts.				Prisoners awaiting or under trial.				Civil Debtors.			
	Average Strength.	Admissions.	Deaths.	Average Daily Sick.	Average Strength.	Admissions.	Deaths.	Average Daily Sick.	Average Strength.	Admissions.	Deaths.	Average Daily Sick.
Bellary	336	133	4	5.48	13	2	1	0.07	14	1	...	0.02
Berhampore	126	107	10	4.71	5	2	...	0.03	1	...	...	...
Cannanore, Central	582	181	11	12.47	...	...	...	...	...	...	...	...
Calicut	109	111	2	2.85	9	2	...	0.19	11	...	...	...
Chingleput	123	115	...	2.96	3	1	...	0.02	3	1	...	0.02
Chittoor	184	259	1	10.07	8	5	...	0.31	8	3	...	0.12
Coimbatore Central	974	283	42	19.11	...	...	...	...	6	...	...	...
Do. District	145	151	20	9.65	7	...	...	...	...	...	...	...
Cuddalore	280	230	5	8.80	23	4	...	0.05	7	...	...	...
Cuddapah	221	253	4	7.43	18	5	...	0.11	21	7	2	0.14
Guindy	62	60	...	1.33	...	...	...	...	...	...	...	...
Guntoor	95	81	3	2.77	4	4	...	0.16	...	...	...	...
Her Majesty's Jail, Madras	...	...	...	...	...	...	...	...	33	37	...	0.58
Kurnool... ..	99	163	4	4.28	1	3	1	0.40	5	3	...	0.04
Madura	213	79	5	3.02	7	1	...	0.02	38	5	...	0.10
Mangalore	106	181	2	4.17	4	6	...	0.91	9	3	...	0.05
Masulipatam	37	74	...	2.58	...	...	...	...	...	...	...	...
Nellore	160	107	2	4.92	2	...	...	...	4	1	...	0.02
Ootacamund, European	21	1	...	0.03	...	...	...	...	...	...	...	...
Do. Native	143	52	1	1.76	...	...	...	...	1	...	...	...
Palamcottah	225	64	6	2.96	11	2	...	0.04	13	...	...	...
Paumben	34	63	...	3.55	...	...	...	...	...	...	...	...
Penitentiary, Madras	550	411	3	20.91	7	3	...	0.16	...	...	...	...
Rajahmundry, Central	829	662	16	31.60	1	1	...	0.38	1	4	...	0.19
Do. District	82	69	1	3.69	13	10	...	0.95	1	...	...	...
Russelcondah	89	80	...	2.03	...	...	...	...	2	...	...	...
Salem, Central... ..	556	179	14	7.42	8	3	...	0.29	4	1	1	...
Tanjore	115	60	8	4.59	3	...	...	...	15	1	...	...
Tellicherry	45	26	1	0.80	3	8	...	0.26	7	3	...	0.16
Tranquebar	100	123	6	4.54	9	2	...	0.04	15	7	2	0.25
Trichinopoly, Central	933	316	56	21.07	...	...	...	...	...	...	...	...
Do. District	71	52	3	3.20	3	1	...	0.03	6	...	...	...
Vellore, Central	951	656	9	16.73	...	...	...	...	...	...	...	...
Vinagapatam	259	69	15	5.66	6	1	1	0.02	2	...	...	...
Total	8,855	5,401	254	237.14	168	71	3	4.44	227	77	5	1.69

VII.

Table showing the Ratio of Admissions, Deaths and Daily Sick among each class of Prisoners in the Madras Presidency during the year 1873.

Jails.	Convicts.			Prisoners awaiting or under Trial.			Civil Debtors.		
	Admissions.	Deaths.	Average Daily Sick.	Admissions.	Deaths.	Average Daily Sick.	Admissions.	Deaths.	Average Daily Sick.
Bellary	395·83	11·90	16·30	153·84	76·92	5·38	71·42	...	1·42
Berhampore	849·20	79·36	37·38	400·0	...	6·0	...	...	...
Cannanore, Central	225·08	18·90	21·42	...	...	...	...	...	...
Calicut	1018·34	18·34	26·14	222·22	...	21·11	...	...	...
Chingleput	934·95	...	24·06	333·33	...	6·66	333·33	...	6·66
Chittoor	1407·60	5·43	54·72	625·00	...	38·75	375·0	...	15·0
Coimbatore, Central	290·55	43·12	19·62	...	...	...	...	...	...
Do. District	1041·37	137·93	66·55	...	...	...	...	...	...
Cuddalore	821·42	17·85	31·42	173·91	...	2·17	...	...	...
Cuddapah	1144·79	18·09	33·61	277·77	...	6·11	333·33	95·23	6·66
Guindy	967·74	...	21·45	...	...	...	...	...	...
Guntoor	852·63	31·57	29·15	1000·0	...	40·0	...	...	...
Her Majesty's Jail, Madras. ...	...	...	...	...	...	...	1121·21	...	17·57
Kurnool	1646·46	40·40	43·23	8000·0	1000·0	400·0	600·0	...	8·0
Madura	370·89	23·47	14·17	142·85	...	2·85	131·57	...	2·63
Mangalore	1707·54	18·86	39·33	1500·0	...	227·5	333·3	...	5·55
Masulipatam	2000·0	...	69·72	...	...	...	...	...	...
Nellore	668·75	12·5	30·75	...	...	...	250·0	...	5·0
Ootacamund, European	47·61	...	1·42	...	...	...	...	...	...
Do. Native	363·63	6·99	12·30	...	...	...	...	...	...
Palamcottah	284·44	26·66	13·19	181·81	...	3·63	...	...	...
Paumben	1852·94	...	104·41	...	...	...	...	...	...
Penitentiary, Madras	747·27	5·45	38·01	428·57	...	22·85	...	...	...
Rajahmundry, Central	798·55	19·30	38·11	1000·0	...	380·0	4000·0	...	190·0
Do. District	841·46	12·19	45·00	769·23	...	73·07	...	...	...
Russelcondah	898·87	...	22·80	...	...	...	...	...	...
Salem Central	321·94	25·17	13·34	375·0	...	36·25	250·0	250·0	...
Tanjore	521·73	69·56	39·91	...	...	...	66·66	...	...
Tellicherry	577·77	22·22	17·77	2666·66	...	86·66	428·57	...	22·85
Tranquebar	1230·0	60·0	45·4	222·22	...	4·44	466·66	133·33	16·66
Trichinopoly, Central	338·69	60·02	22·58	...	...	...	...	...	...
Do. District	732·39	42·25	45·07	333·33	...	10·0	...	...	...
Vellore, Central	689·80	9·46	17·59	...	...	...	...	...	...
Vizagapatam	266·40	57·91	21·85	166·66	166·66	3·30	...	...	...
Total	609·93	28·68	26·78	422·61	17·85	26·42	339·20	22·02	7·44

Table showing the Admissions and Deaths among the Jail Population of the Madras Presidency during the year 1878, according to Age and length of Confinement.

		Age.													Length of Confinement.										
		Under 15 years.	15 to 20 years.	20 to 25 years.	25 to 30 years.	30 to 35 years.	35 to 40 years.	40 to 45 years.	45 to 50 years.	50 to 55 years.	55 to 60 years.	Above 60 years.	Total.	Under 1 year.	1 to 2 years.	2 to 3 years.	3 to 4 years.	4 to 5 years.	5 to 6 years.	6 to 7 years.	7 to 10 years.	10 to 15 years.	15 to 20 years.	Above 20 years.	Total.
Strength	...	74	887	1,757	1,887	1,405	1,257	702	568	335	240	140	9,250	3,267	849	967	642	743	565	515	833	456	174	239	9,250
Admissions	...	44	364	977	1,314	975	730	380	271	177	168	149	5,549	2,499	786	608	287	265	240	177	282	215	38	152	5,549
Deaths	...	1	6	24	38	35	33	23	22	23	22	35	262	113	37	31	18	9	6	9	15	17	...	7	262
Ratio per 1,000 of Strength.																									
Admissions	...	594.59	410.37	556.06	696.34	693.95	580.74	541.31	478.79	528.35	700.0	1064.28	599.89	764.92	925.79	638.74	447.04	356.66	424.77	343.68	338.53	471.49	218.39	635.98	599.89
Deaths	...	13.51	6.76	13.65	20.13	24.91	26.41	32.76	38.86	68.65	91.66	250.0	28.32	34.58	43.58	32.05	28.03	12.11	10.61	17.47	18.00	37.28	...	29.28	28.32

VITAL STATISTICS
OF THE
GENERAL POPULATION.

I.
Deaths registered in the Rural Circles and Towns of the Madras Presidency during the year 1873.

No.	Population according to the Census of 1871.	Names of Districts.	Population for which Returns were received.			Area in Square Miles.	Average Population per Square Mile.	Number of Deaths registered.			Ratio of Deaths per 1,000 of Population.		Mean Ratio of Deaths per 1,000 during previous 15 years.	
			Males.	Females.	Total.			Males.	Females.	Total.	Males.	Females.	Males.	Females.
1	1,388,976	Ganjam District	631,013	571,180	1,202,193	8,313	167.1	7,619	6,613	14,232	12.0	11.5	11.8	11.8
2	533,843	(Talucs (R. C.)	265,508	268,335	533,843			3,309	2,821	6,130	12.4	10.5	11.4	11.4
3	37,257	Total. { Municipal Towns ...	18,074	19,183	37,257			357	348	705	19.7	18.1	18.9	18.9
4	817,376	Zemindaries ...	347,431	283,662	631,093			3,953	3,444	7,397	11.3	12.01	11.7	11.7
5	1,844,711	Vizagapatnam District	780,149	748,818	1,528,967	18,344	100.5	10,072	8,359	18,431	12.9	11.1	12.05	12.05
6	937,015	(Talucs (R. C.)	391,654	377,467	772,121			5,087	4,026	9,113	12.9	10.6	11.7	11.7
7	69,916	Total. { Municipal Towns ...	34,370	35,546	69,916			1,003	822	1,825	29.1	23.1	26.1	26.1
8	837,750	Zemindaries ...	351,125	335,805	686,930			3,982	3,511	7,493	11.3	10.4	10.9	10.9
9	1,592,939	Godavery District	803,603	789,336	1,592,939	6,224	255.9	16,268	14,954	31,222	20.2	18.9	19.6	19.6
10	1,326,047	(Talucs (R. C.)	667,891	658,156	1,326,047			13,610	12,440	26,050	20.3	18.8	19.6	19.6
11	63,064	Total. { Municipal Towns ...	33,338	29,726	63,064			847	823	1,670	25.4	27.6	26.4	26.4
12	203,828	Zemindaries ...	102,374	101,454	203,828			1,811	1,691	3,502	17.6	16.6	17.1	17.1
13	1,452,374	Kistna District	737,495	714,879	1,452,374	8,036	180.7	14,551	11,852	26,403	19.7	16.5	18.1	18.1
14	1,235,026	(Talucs (R. C.)	628,046	606,980	1,235,026			12,216	9,880	22,096	19.4	16.2	17.8	17.8
15	54,221	Total. { Municipal Towns ...	28,312	27,879	56,191			592	563	1,155	22.4	18.1	20.2	20.2
16	163,127	Zemindaries ...	83,107	80,020	163,127			1,743	1,466	3,209	20.9	18.3	19.6	19.6
17	1,376,811	Nellore District	707,392	669,419	1,376,811	8,462	162.7	10,318	9,033	19,351	14.5	13.4	14.05	14.05
18	1,107,697	(Talucs (R. C.)	568,392	539,305	1,107,697			6,616	6,797	12,413	11.6	10.7	11.2	11.2
19	29,922	Total. { Municipal Towns ...	14,879	15,043	29,922			258	193	451	17.3	12.8	15.07	15.07
20	239,192	Zemindaries ...	124,121	115,071	239,192			3,444	3,043	6,487	27.7	26.4	27.1	27.1
21	397,552	Madras Town (R. C.)	194,676	202,876	397,552	27	14,724.1	7,208	7,401	14,609	37.02	36.4	36.7	36.7
22	938,184	Chingleput District	475,968	462,216	938,184	2,753	340.7	9,340	9,154	18,494	19.6	19.8	19.7	19.7
23	900,857	(Talucs (R. C.)	457,716	443,141	900,857			8,922	8,737	17,659	19.4	19.7	19.6	19.6
24	37,327	Total. { Municipal Towns ...	18,252	19,075	37,327			418	417	835	22.9	21.8	22.3	22.3
25	1,755,817	South Arcot District	885,922	869,895	1,755,817	4,873	360.3	12,778	11,552	24,330	14.4	13.2	13.8	13.8
26	1,715,527	(Talucs (R. C.)	865,417	849,110	1,715,527			12,424	11,232	23,656	14.3	13.2	13.7	13.7
27	40,290	Total. { Municipal Towns ...	19,505	20,785	40,290			354	320	674	18.1	15.3	16.7	16.7
28	1,200,408	Trichinopoly District	588,134	612,274	1,200,408	3,515	341.5	11,081	10,886	21,966	18.8	17.7	18.2	18.2
29	1,112,607	(Talucs (R. C.)			1,112,607			10,116	9,908	20,024	...	...	17.9	17.9
30	87,801	Total. { Municipal Towns ...			87,801			965	977	1,942	...	...	22.1	22.1
31	1,973,731	Tanjore District	953,968	1,019,763	1,973,731	3,654	540.1	22,460	21,787	44,247	23.5	21.3	22.4	22.4
32	1,789,719	(Talucs (R. C.)	866,492	923,227	1,789,719			19,834	19,204	39,038	22.8	20.8	21.8	21.8
33	184,012	Total. { Municipal Towns ...	87,476	96,536	184,012			2,626	2,579	5,205	30.01	27.4	28.2	28.2
34	2,266,615	Madura District	1,112,066	1,154,549	2,266,615	9,502	238.5	10,959	10,378	21,337	9.8	8.9	9.4	9.4
35	1,263,379	(Talucs (R. C.)	623,731	639,648	1,263,379			6,922	6,613	13,535	11.09	10.3	10.7	10.7
36	64,852	Total. { Municipal Towns ...	32,764	32,088	64,852			749	716	1,464	22.8	22.2	22.5	22.5
37	938,384	Zemindaries ...	455,571	482,813	938,384			8,288	3,060	6,388	7.2	6.3	6.7	6.7

not available.

Information

38	1,693,969	Tinnevely District	896,515	887,444	1,693,969	5,176	827.3	12,951	11,963	24,914	15.4	18.9	14.7
39	1,644,405	Total. {Talugs (R. C.)	811,386	892,569	1,644,405	...	...	12,183	11,209	23,371	14.9	18.4	14.3
40	49,554	Municipal Towns	24,979	24,875	49,554	...	...	789	754	1,543	31.9	80.8	31.1
41	959,640	Kurnool District	497,640	446,792	914,432	7,368	180.4	8,484	7,548	16,032	17.2	16.1	16.7
42	831,558	Total. {Talugs (R. C.)	451,488	480,070	881,558	...	...	7,920	6,940	14,860	17.5	16.1	16.8
43	32,874	Municipal Towns	16,153	16,732	32,874	...	...	564	608	1,172	34.9	36.3	35.6
44	45,208	Zemindaries	...	...	...	No returns received.	...	...	...	...	...	...	...
45	1,351,194	Onddapa District	698,400	687,794	1,351,194	8,867	161.5	10,452	9,459	19,911	15.07	14.3	14.7
46	1,394,919	Total. {Talugs (R. C.)	685,071	649,848	1,394,919	...	...	10,119	9,191	19,310	14.7	14.1	14.4
47	16,275	Municipal Towns	8,329	7,946	16,275	...	...	333	268	601	39.9	33.7	36.9
48	1,668,006	Bellary District	860,173	807,833	1,668,006	11,007	151.5	15,084	14,715	29,799	17.5	18.2	17.8
49	1,566,878	Total. {Talugs (R. C.)	807,871	759,002	1,566,878	...	...	14,109	18,608	27,717	17.4	17.9	17.6
50	86,137	Municipal Towns	44,768	41,969	86,137	...	...	818	944	1,762	18.2	22.8	20.4
51	14,996	Zemindaries	7,534	7,462	14,996	...	...	187	163	320	20.8	21.8	21.2
52	2,015,278	North Arcot District	1,020,678	994,600	2,015,278	7,139	282.3	22,761	22,355	45,116	22.2	22.4	22.3
53	1,301,147	Total. {Talugs (R. C.)	668,401	642,746	1,301,147	...	...	16,622	16,390	30,952	23.7	23.8	23.7
54	50,125	Municipal Towns	23,970	23,125	50,125	...	...	621	531	1,152	25.9	20.2	23.9
55	684,006	Zemindaries	338,307	325,699	684,006	...	...	6,518	6,494	13,012	19.2	19.9	19.5
56	1,966,995	Salem District	975,502	991,498	1,966,995	7,438	262.9	25,346	23,683	49,029	25.9	23.8	24.9
57	1,916,983	Total. {Talugs (R. C.)	960,560	966,428	1,916,983	...	...	24,713	23,112	47,825	25.9	23.9	24.9
58	50,012	Municipal Towns	24,942	25,070	50,012	...	...	633	671	1,204	26.3	22.7	24.07
59	1,763,274	Coimbatore District	874,975	888,299	1,763,274	7,432	237.3	12,810	11,053	23,863	14.6	12.4	13.5
60	1,717,763	Total. {Talugs (R. C.)	...	...	1,717,763	...	...	12,511	10,745	23,256	...	...	13.5
61	45,511	Municipal Towns	...	...	45,511	...	...	299	308	607	...	...	13.3
62	49,501	Neigherry District	27,192	22,309	49,501	749	66.0	463	417	880	17.0	18.6	17.7
63	36,461	Total. {Talugs (R. C.)	20,269	16,192	36,461	...	...	285	206	491	14.06	12.7	13.4
64	13,040	Municipal Towns	6,928	6,117	13,040	...	...	178	211	389	25.7	34.4	29.3
65	918,362	South Canara District	459,729	458,633	918,362	3,902	235.4	6,957	6,286	13,243	15.1	13.7	14.4
66	888,650	Total. {Talugs (R. C.)	444,541	444,109	888,650	...	...	6,640	5,998	12,638	14.9	13.5	14.2
67	29,712	Municipal Towns	15,188	14,524	29,712	...	...	317	288	605	20.8	19.8	20.3
68	2,261,250	Malabar District	1,134,889	1,126,861	2,261,250	6,002	376.7	19,794	16,029	35,823	17.4	14.1	15.3
69	2,138,933	Total. {Talugs (R. C.)	1,073,718	1,065,220	2,138,933	...	...	17,710	14,256	31,966	16.4	13.3	14.9
70	122,317	Municipal Towns	61,176	61,141	122,317	...	...	2,084	1,773	3,857	34.06	28.9	31.5

Summary of Deaths in the Madras Presidency during the year 1873.

	Total Number of	Population according to Census of 1871.	Population for which Returns were received.			Total Deaths.			Ratio of Deaths per 1,000 of Population in 1878.			Mean Ratio per 1,000 in previous 16 years.		
			Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
Rural Circles (Talugs)	164	25,349,489	12,651,677	12,554,310	25,194,515	220,847	201,257	422,104	17.4	16.02	16.7			
Municipal Towns	47	1,561,771	759,833	790,497	1,551,771	22,013	21,357	43,370	28.9	27.3	27.7			
Zemindaries	9	3,924,367	1,809,570	1,731,986	3,541,556	24,896	22,863	47,759	18.7	18.1	18.4			
Total...	220	30,835,577	15,221,079	15,066,763	30,287,842	267,756	245,476	513,232	17.5	16.2	16.9			

II.

Deaths registered in the Rural Circles and Towns of the Madras Presidency during each Month of the Year 1873.

No.	Population according to the Census of 1871.	Names of Rural Circles and Towns.	Population for which Returns were received.			January.			February.			March.			April.		
			Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
1	1,388,976	Ganjam District	631,013	571,180	1,202,193	1,002	918	1,920	777	644	1,421	824	650	1,474	665	604	1,269
2	533,843	Talucs (R. C.)	265,508	268,335	533,843	386	337	723	331	283	614	352	252	604	318	284	602
3	37,257	Total. {	18,074	19,183	37,257	22	37	59	29	25	54	32	34	66	24	24	48
4	817,876	Zemindaries	347,431	283,662	631,093	594	644	1,138	417	336	753	440	364	804	323	296	619
5	1,844,711	Vizagapatam District	780,149	748,818	1,528,967	1,290	1,070	2,360	884	694	1,578	682	551	1,233	736	629	1,365
6	937,045	Talucs (R. C.)	394,654	377,467	772,121	694	626	1,320	423	341	764	341	267	608	395	326	721
7	69,916	Total. {	34,370	35,546	69,916	91	84	175	62	65	127	68	64	132	74	55	129
8	837,750	Zemindaries	351,125	335,805	686,930	505	460	965	399	298	687	273	220	493	267	248	515
9	1,592,939	Godavery District	803,603	789,336	1,592,939	1,580	1,342	2,922	1,040	900	1,940	1,074	953	2,027	1,041	982	2,023
10	1,326,047	Talucs (R. C.)	667,891	658,156	1,326,047	1,281	1,105	2,386	857	754	1,611	866	759	1,625	842	801	1,643
11	63,064	Total. {	33,338	29,726	63,064	79	76	155	59	57	116	61	66	127	81	65	146
12	203,828	Zemindaries	102,374	101,454	203,828	220	161	381	124	89	213	147	128	275	118	116	234
13	1,452,374	Kistna District	737,495	714,879	1,452,374	1,399	1,128	2,527	900	719	1,619	994	705	1,699	899	736	1,635
14	1,235,026	Talucs (R. C.)	628,046	606,990	1,235,036	1,217	966	2,183	753	599	1,352	876	620	1,496	730	607	1,337
15	54,221	Total. {	26,342	27,879	54,221	44	31	75	45	34	79	41	21	62	58	38	96
16	163,127	Zemindaries	83,107	80,020	163,127	138	131	269	102	86	188	77	64	141	111	91	202
17	1,376,811	Nellore District	707,392	669,419	1,376,811	1,190	1,010	2,200	732	585	1,317	774	693	1,467	705	646	1,351
18	1,107,697	Talucs (R. C.)	568,392	539,305	1,107,697	786	630	1,416	481	387	868	520	466	986	472	429	901
19	29,922	Total. {	14,879	15,043	29,922	13	13	26	17	12	29	28	14	42	19	14	33
20	239,192	Zemindaries	124,121	115,071	239,192	391	367	758	234	186	420	226	213	439	214	203	417
21	397,552	Madras Town	194,676	202,876	397,552	629	632	1,311	535	618	1,153	649	622	1,271	617	596	1,213
22	938,184	Chingleput District	475,968	462,216	938,184	797	753	1,555	706	691	1,397	781	703	1,484	684	633	1,317
23	900,857	Talucs (R. C.)	457,716	443,141	900,857	789	746	1,535	696	685	1,381	767	693	1,460	662	602	1,264
24	37,327	Total. {	18,252	19,075	37,327	8	12	20	10	6	16	14	10	24	22	31	53
25	1,755,817	South Arcot District	885,922	869,895	1,755,817	927	809	1,746	909	836	1,745	1,121	1,002	2,123	1,106	995	2,101
26	1,715,527	Talucs (R. C.)	866,417	849,110	1,715,527	904	776	1,680	881	807	1,688	1,076	976	2,052	1,078	964	2,042
27	40,290	Total. {	19,505	20,785	40,290	23	33	56	28	29	57	45	26	71	28	31	59
28	1,200,408	Trichinopoly District	588,134	612,274	1,200,408	987	983	1,970	717	687	1,404	791	753	1,544	835	790	1,625
29	1,112,607	Talucs (R. C.)	557,716	554,891	1,112,607	922	907	1,829	642	615	1,257	734	677	1,411	762	721	1,483
30	87,801	Total. {	43,885	43,916	87,801	65	76	141	75	72	147	57	76	133	73	69	142
31	1,973,731	Tanjore District	953,968	1,019,763	1,973,731	1,888	1,809	3,697	1,573	1,447	3,020	1,672	1,653	3,325	1,622	1,588	3,210
32	1,789,719	Talucs (R. C.)	866,492	923,227	1,789,719	1,704	1,624	3,328	1,415	1,281	2,696	1,502	1,481	2,983	1,429	1,399	2,823
33	184,012	Total. {	87,476	96,536	184,012	184	186	369	168	166	324	170	172	342	193	189	382

84	2,266,615	1,112,066	1,154,549	2,266,615	1,263	1,108	2,266	966	928	1,893	872	789	1,631	814	719	1,533
85	1,263,379	638,781	639,648	1,263,379	729	634	1,263	533	520	1,043	518	508	1,021	484	428	912
86	64,852	32,088	32,088	64,852	47	41	64	34	33	67	37	508	69	45	81	76
87	938,384	482,813	482,813	938,384	486	441	927	408	375	788	317	254	571	285	280	545
88	1,693,959	836,515	837,444	1,693,959	1,599	1,507	3,106	1,141	1,011	2,152	1,084	1,006	2,040	983	895	1,878
89	1,644,405	811,886	832,569	1,644,405	1,518	1,416	2,984	1,077	960	2,037	955	942	1,897	919	885	1,754
40	49,554	24,679	24,875	49,554	81	91	172	64	51	115	79	64	148	64	60	124
41	959,640	467,640	446,792	914,432	851	804	1,655	580	496	1,076	784	625	1,359	786	598	1,829
42	881,558	451,498	490,070	881,558	784	715	1,499	516	444	960	689	572	1,261	678	549	1,297
43	32,374	16,152	16,723	32,374	67	89	156	64	52	116	45	53	98	58	44	102
44	45,208	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
45	1,351,194	698,400	687,794	1,351,194	900	773	1,673	683	611	1,294	790	681	1,471	780	662	1,392
46	1,334,919	685,071	649,843	1,334,919	861	743	1,609	681	581	1,242	751	647	1,398	707	643	1,350
47	16,275	8,329	7,946	16,275	39	25	64	22	30	52	39	34	73	23	19	42
48	1,668,006	860,173	807,833	1,668,006	1,265	1,198	2,458	991	980	1,921	1,152	1,109	2,261	1,106	985	2,091
49	1,666,873	807,871	759,002	1,666,873	1,173	1,116	2,287	925	867	1,792	1,068	1,084	2,092	1,011	917	1,983
50	86,137	44,768	41,869	86,137	76	61	137	51	56	107	81	54	135	79	59	188
51	14,996	7,534	7,463	14,996	17	17	34	15	7	22	13	21	84	16	9	25
52	2,015,278	1,020,678	994,600	2,015,278	2,063	2,117	4,180	1,868	1,768	3,626	2,014	2,008	4,022	2,068	2,082	4,190
53	1,301,147	658,401	642,746	1,301,147	1,437	1,508	2,915	1,348	1,260	2,608	1,450	1,464	2,914	1,492	1,478	2,970
54	50,125	23,970	26,125	50,125	60	44	104	51	39	90	54	29	83	46	41	87
55	664,006	338,807	325,699	664,006	566	595	1,161	469	459	928	510	515	1,025	550	513	1,063
56	1,966,995	975,502	991,498	1,966,995	2,597	2,409	5,006	2,267	2,108	4,870	2,352	2,187	4,589	2,009	1,825	3,884
57	1,916,983	950,560	966,423	1,916,983	2,511	2,381	4,843	2,204	2,045	4,249	2,273	2,118	4,391	1,961	1,786	3,747
58	50,012	24,942	25,070	50,012	86	76	164	63	58	121	79	69	143	48	39	87
59	1,763,274	874,975	868,299	1,763,274	1,127	992	2,119	1,122	991	2,043	1,072	882	1,954	1,073	954	2,027
60	1,717,763	...	...	1,717,763	1,093	968	2,061	1,069	869	1,938	1,040	889	1,879	1,046	923	1,969
61	45,511	...	...	45,511	34	24	58	53	52	105	32	43	75	27	31	53
62	49,501	27,192	22,309	49,501	28	25	53	26	26	52	28	26	54	41	36	77
63	36,461	20,269	16,193	36,461	17	13	30	14	6	20	15	9	24	20	18	38
64	18,040	6,923	6,117	18,040	11	12	23	12	20	32	13	17	30	21	18	39
65	918,362	459,729	458,638	918,362	689	691	1,390	561	478	1,039	590	495	1,025	503	477	980
66	888,650	444,541	444,109	888,650	662	662	1,324	545	458	1,008	501	475	976	484	465	949
67	29,712	15,188	14,524	29,712	27	29	56	16	20	36	29	20	49	19	12	31
68	2,261,250	1,134,889	1,126,361	2,261,250	1,952	1,571	3,523	1,860	1,478	3,838	1,756	1,869	3,125	1,701	1,324	3,025
69	2,138,938	1,073,718	1,065,290	2,138,938	1,716	1,892	3,108	1,642	1,296	2,987	1,572	1,315	2,787	1,528	1,193	2,716
70	122,317	61,176	61,141	122,317	236	179	415	218	183	401	184	154	388	178	181	309
Total Madras Presidency		15,221,079	15,066,768	30,287,842	26,022	23,697	49,719	20,837	18,561	39,398	21,696	19,462	41,158	20,694	18,701	39,895
Ratio per 1,000 of Population ...		...	...	...	1.7	1.5	1.6	1.3	1.2	1.3	1.4	1.2	1.3	1.3	1.2	1.3

II.—(Continued.)
Deaths registered in the Rural Circles and Towns of the Madras Presidency during each Month of the Year 1872.

No.	Population according to the Census of 1871.	Names of Rural Circles and Towns.	Population for which Returns were received.			May.			June.			July.			August.		
			Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
1	1,388,976	Ganjam District ...	631,013	571,180	1,202,193	586	468	1,054	535	461	996	469	447	916	575	557	1,132
2	533,843	Talugu (R. C.) ...	265,508	268,335	533,843	258	200	458	236	193	429	221	178	399	267	271	538
3	37,257	Total. { Municipal Towns ...	18,074	19,183	37,257	28	23	51	27	26	53	18	15	33	34	38	72
4	817,876	Zemindaries ...	347,431	283,662	631,093	300	245	545	272	242	514	230	254	484	274	248	522
5	1,844,711	Vizagapatam District ...	780,149	748,818	1,528,967	743	600	1,343	714	628	1,342	742	629	1,371	811	673	1,484
6	937,045	Talugu (R. C.) ...	394,654	377,467	772,121	337	253	590	358	309	667	413	302	715	407	327	734
7	69,916	Total. { Municipal Towns ...	34,370	35,546	69,916	89	63	152	82	65	147	62	61	123	96	74	170
8	837,750	Zemindaries ...	351,125	335,805	686,930	317	281	601	274	254	528	267	266	533	308	272	580
9	1,592,939	Godavery District ...	803,603	789,336	1,592,939	1,012	958	1,970	912	863	1,775	1,138	1,200	2,338	1,309	1,354	2,663
10	1,326,047	Talugu (R. C.) ...	687,891	658,156	1,346,047	813	782	1,595	755	701	1,456	956	1,005	1,961	1,092	1,149	2,241
11	63,064	Total. { Municipal Towns ...	33,338	29,726	63,064	53	56	109	54	58	112	64	66	130	67	68	135
12	203,828	Zemindaries ...	102,374	101,454	203,828	116	120	236	103	104	207	118	129	247	150	137	287
13	1,452,374	Kistna District ...	737,495	714,879	1,452,374	860	708	1,568	806	745	1,551	900	834	1,734	1,006	885	1,891
14	1,235,026	Talugu (R. C.) ...	628,046	606,980	1,235,026	798	588	1,386	672	610	1,282	729	694	1,423	851	761	1,612
15	54,221	Total. { Municipal Towns ...	26,342	27,879	54,221	50	48	98	45	48	93	59	58	117	51	45	96
16	163,127	Zemindaries ...	83,107	80,020	163,127	72	72	144	89	87	176	112	82	194	104	79	183
17	1,376,811	Nellore District ...	707,392	669,419	1,376,811	629	589	1,218	647	585	1,232	681	618	1,299	747	617	1,364
18	1,107,697	Talugu (R. C.) ...	588,392	539,305	1,127,697	400	385	785	413	410	823	434	397	831	475	381	856
19	29,922	Total. { Municipal Towns ...	14,879	15,043	29,922	22	10	32	16	8	24	15	18	33	26	22	48
20	239,192	Zemindaries ...	124,121	115,071	239,192	207	194	401	218	167	385	232	203	435	246	214	460
21	397,552	Madras Town ...	194,676	202,876	397,552	591	623	1,214	587	570	1,157	584	630	1,214	565	614	1,179
22	938,184	Chingleput District ...	475,968	462,216	938,184	678	661	1,339	654	611	1,265	752	747	1,499	720	727	1,447
23	900,857	Talugu (R. C.) ...	457,716	443,141	900,857	624	612	1,236	610	564	1,174	704	706	1,410	676	676	1,352
24	87,327	Total. { Municipal Towns ...	18,252	19,075	37,327	54	49	103	44	47	91	48	41	89	44	51	95
25	1,755,817	South Arcot District ...	885,922	869,895	1,755,817	1,044	929	1,973	960	862	1,822	1,036	938	1,974	946	929	1,875
26	1,715,527	Talugu (R. C.) ...	866,417	849,110	1,715,527	1,013	896	1,909	929	833	1,762	1,012	916	1,928	920	911	1,831
27	40,290	Total. { Municipal Towns ...	19,505	20,785	40,290	31	33	64	31	29	60	24	22	46	26	18	44
28	1,200,408	Trichinopoly District ...	588,134	612,274	1,200,408	838	826	1,664	845	753	1,598	901	893	1,794	911	859	1,770
29	1,112,607	Talugu (R. C.) ...	588,134	612,274	1,200,408	838	826	1,664	845	753	1,598	901	893	1,794	911	859	1,770
30	87,801	Total. { Municipal Towns ...	43,801	44,000	87,801	76	76	152	76	72	148	80	76	156	93	88	181
31	1,978,731	Tanjore District ...	983,968	1,019,763	1,978,731	1,721	1,686	3,407	1,728	1,672	3,400	1,981	1,931	3,912	2,040	1,959	3,999
32	1,789,719	Talugu (R. C.) ...	866,492	923,227	1,789,719	1,498	1,499	2,997	1,511	1,446	2,957	1,754	1,689	3,443	1,819	1,722	3,541
33	184,012	Total. { Municipal Town ...	87,476	96,536	184,012	223	187	410	217	226	443	227	242	469	221	237	468

34	2,366,615	Madras District ...	1,113,068	1,154,549	2,366,615	794	770	1,564	763	739	1,531	861	868	1,749	948	870	1,818
35	1,933,379	{ Taluqs (R. C.)	623,731	639,648	1,263,379	514	491	995	473	469	985	538	550	1,063	581	496	1,099
36	64,852	{ Municipal Towns	32,764	32,088	64,852	45	45	90	56	50	106	72	69	141	71	65	186
37	938,884	{ Zemindaries	455,571	482,813	938,884	235	244	479	263	227	480	256	269	525	348	307	653
38	1,698,959	Thinnevely District	...	857,444	1,698,959	844	776	1,680	898	783	1,671	980	855	1,785	949	883	1,838
39	1,844,405	{ Taluqs (R. C.)	811,836	832,569	1,644,405	803	712	1,514	789	689	1,478	858	903	1,660	895	831	1,703
40	49,554	{ Municipal Towns	24,679	24,875	49,554	42	64	108	49	44	98	72	53	125	64	62	126
41	959,640	Kurnool District	...	448,792	914,432	679	547	1,228	584	532	1,116	711	634	1,845	694	632	1,316
42	881,558	{ Taluqs (R. C.)	451,493	480,070	881,558	630	504	1,134	540	482	1,022	678	576	1,254	651	592	1,238
43	32,874	{ Municipal Towns	15,153	16,722	32,874	49	43	92	44	50	94	33	58	91	43	40	83
44	45,908	{ Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
45	1,351,194	Cuddapah District	638,400	657,794	1,351,194	789	718	1,507	709	684	1,378	863	817	1,680	917	858	1,775
46	1,334,919	{ Taluqs (R. C.)	685,071	694,848	1,334,919	754	696	1,450	688	646	1,334	831	804	1,635	890	831	1,721
47	16,275	{ Municipal Towns	8,329	7,946	16,275	35	22	57	21	18	39	32	13	45	27	27	54
48	1,688,006	Bellary District	860,173	807,833	1,688,006	1,104	1,063	2,197	1,097	1,115	2,212	1,393	1,259	2,652	1,490	1,410	2,840
49	1,566,873	{ Taluqs (R. C.)	807,871	769,002	1,566,873	1,035	1,008	2,043	1,088	1,035	2,073	1,313	1,160	2,473	1,346	1,287	2,638
50	86,137	{ Municipal Towns	44,768	41,369	86,137	54	77	131	47	64	111	70	85	155	71	114	185
51	14,986	{ Zemindaries	7,534	7,452	14,986	15	8	23	12	16	28	10	14	24	13	9	22
52	2,015,278	North Arcot District	1,020,678	994,600	2,015,278	1,926	1,981	3,907	1,792	1,870	3,662	1,780	1,755	3,535	1,664	1,695	3,249
53	1,301,147	{ Taluqs (R. C.)	658,401	642,746	1,301,147	1,355	1,400	2,755	1,227	1,260	2,487	1,200	1,220	2,420	1,167	1,097	2,254
54	50,125	{ Municipal Towns	23,970	26,155	50,125	49	45	94	52	47	99	50	56	106	49	49	98
55	684,006	{ Zemindaries	398,307	325,699	684,006	522	536	1,063	513	563	1,076	530	479	1,009	458	539	997
56	1,966,995	Salem District	975,502	991,493	1,966,995	1,961	1,986	3,967	1,802	1,595	3,197	1,845	1,709	3,555	1,868	1,788	3,646
57	1,916,983	{ Taluqs (R. C.)	950,560	966,423	1,916,983	1,917	1,905	3,822	1,561	1,560	3,121	1,795	1,654	3,449	1,805	1,728	3,633
58	50,012	{ Municipal Towns	24,942	25,070	50,012	44	31	75	41	35	76	51	55	106	58	55	113
59	1,768,274	Coimbatore District	874,975	888,299	1,768,274	896	803	1,699	911	807	1,718	999	902	1,901	1,024	930	1,964
60	1,717,763	{ Taluqs (R. C.)	...	...	1,717,763	874	789	1,692	893	787	1,690	976	896	1,861	1,007	904	1,911
61	45,511	{ Municipal Towns	...	...	45,511	22	15	37	18	20	38	23	17	40	17	26	43
62	49,501	Neelgherry District	27,192	23,309	49,501	42	48	90	55	53	108	49	44	98	43	25	73
63	36,461	{ Taluqs (R. C.)	20,269	16,192	36,461	25	18	43	39	30	69	30	26	55	35	15	50
64	13,040	{ Municipal Towns	6,923	6,117	13,040	17	80	47	16	23	89	19	18	37	13	10	23
65	918,362	South Canara District	459,729	458,633	918,362	452	383	835	526	518	1,044	728	640	1,368	616	563	1,179
66	888,650	{ Taluqs (R. C.)	444,541	444,109	888,650	495	366	801	505	498	1,003	693	617	1,310	533	521	1,104
67	29,712	{ Municipal Towns	15,188	14,524	29,712	17	17	34	21	20	41	35	23	58	33	42	76
68	2,261,250	Malabar District	1,194,889	1,196,361	2,261,250	1,474	1,200	2,674	1,608	1,312	2,920	1,746	1,542	3,288	1,658	1,414	3,087
69	2,188,933	{ Taluqs (R. C.)	1,078,713	1,065,290	2,188,933	1,334	1,074	2,408	1,448	1,162	2,610	1,573	1,362	2,985	1,527	1,261	2,788
70	122,317	{ Municipal Towns	61,176	61,141	122,317	140	126	266	160	160	310	173	180	353	126	159	279
80,555,577	Total Madras Presidency	...	15,231,079	15,066,763	30,297,842	19,663	18,303	37,966	18,892	17,688	36,580	21,090	19,912	41,002	21,436	20,217	41,633
	Ratio per 1,000 of Population	...	...	...	...	1.2	1.2	1.2	1.2	1.1	1.2	1.3	1.3	1.3	1.4	1.3	1.3

II.—(Continued.)
Deaths registered in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873.

No.	Population according to the Census of 1871.	Names of Rural Circles and Towns.	Population for which Returns were received.			September.			October.			November.			December.			Total.			
			Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	Males.	Females.	Total.	
1	1,388,976	Ganjam District	631,013	571,180	1,202,193	600	569	1,169	477	428	905	492	375	867	617	492	1,109	7,619	6,613	14,232	
2	533,843	{ Taluqs (R. C.)	265,508	268,335	533,843	274	257	531	236	203	439	179	137	316	231	226	457	3,309	2,821	6,130	
3	37,257	Total. { Municipal Towns	18,074	19,183	37,257	36	34	70	31	39	70	34	27	61	61	42	26	68	357	348	705
4	817,876	{ Zemindaries	347,431	283,662	631,093	290	278	568	210	186	396	279	211	490	324	240	564	3,953	3,444	7,397	
5	1,844,711	Vizagapatam District	780,149	748,818	1,528,967	870	721	1,591	831	711	1,542	842	699	1,541	927	754	1,681	10,072	8,359	18,431	
6	937,045	{ Taluqs (R. C.)	394,654	377,467	772,121	426	335	761	417	328	746	469	339	746	469	373	842	6,087	4,026	9,113	
7	69,916	Total. { Municipal Towns	35,470	35,546	69,916	99	73	172	87	71	158	94	76	170	99	71	170	1,003	822	1,825	
8	837,750	{ Zemindaries	351,125	335,805	686,930	345	313	658	327	312	639	341	284	625	359	310	669	3,982	3,511	7,493	
9	1,592,939	Godavery District	803,603	789,336	1,592,939	1,376	1,333	2,709	1,332	1,181	2,513	2,116	1,858	3,974	2,338	2,030	4,368	16,268	14,954	31,222	
10	1,326,047	{ Taluqs (R. C.)	667,891	658,156	1,326,047	1,145	1,110	2,255	1,109	970	2,079	1,845	1,590	3,435	2,019	1,714	3,733	13,610	12,440	26,050	
11	63,064	Total. { Municipal Towns	33,338	29,726	63,064	67	72	139	79	67	146	90	79	169	93	98	186	847	823	1,670	
12	203,828	{ Zemindaries	102,374	101,454	203,828	164	151	315	144	144	288	181	189	370	226	223	449	1,811	1,691	3,502	
13	1,452,374	Kistna District	737,495	714,879	1,452,374	999	852	1,851	1,017	862	1,879	2,586	1,986	4,572	2,185	1,692	3,877	14,551	11,852	26,403	
14	1,235,026	{ Taluqs (R. C.)	528,046	606,980	1,235,026	819	730	1,579	873	713	1,586	2,165	1,626	3,791	1,763	1,366	3,129	12,216	9,880	22,096	
15	54,221	Total. { Municipal Towns	26,342	27,879	54,221	41	42	83	47	59	106	57	41	98	54	41	95	592	506	1,098	
16	163,127	{ Zemindaries	83,107	80,020	163,127	109	89	189	97	90	187	364	319	683	368	285	653	1,743	1,466	3,209	
17	1,376,811	Nellore District	707,392	669,419	1,376,811	788	697	1,485	832	810	1,642	1,314	1,121	2,435	1,279	1,062	2,341	10,318	9,038	19,351	
18	1,107,697	{ Taluqs (R. C.)	568,392	539,305	1,107,697	499	449	948	549	511	1,060	817	684	1,501	770	638	1,408	6,616	6,795	12,413	
19	29,922	Total. { Municipal Towns	14,879	15,043	29,922	27	23	50	22	17	39	26	21	47	27	21	48	258	193	451	
20	239,192	{ Zemindaries	124,121	115,071	239,192	262	225	487	261	252	513	471	416	887	482	403	885	3,444	3,043	6,487	
21	397,552	Madras Town...	194,676	202,876	397,552	523	590	1,113	580	577	1,157	656	605	1,261	692	674	1,366	7,208	7,401	14,609	
22	938,184	Chingleput District	475,968	462,216	938,184	702	759	1,461	819	843	1,662	934	966	1,900	1,113	1,055	2,168	9,340	9,154	18,494	
23	900,857	{ Taluqs (R. C.)	457,716	443,141	900,857	666	716	1,382	790	804	1,594	888	909	1,797	1,050	1,024	2,074	8,922	8,737	17,659	
24	37,327	Total. { Municipal Towns	18,252	19,075	37,327	36	43	79	29	39	68	46	57	103	63	31	94	418	417	835	
25	1,755,817	South Arcot District...	885,922	869,895	1,755,817	1,011	916	1,927	1,064	976	2,040	1,321	1,208	2,529	1,333	1,152	2,485	12,778	11,552	24,330	
26	1,715,527	{ Taluqs (R. C.)	866,417	849,110	1,715,527	982	895	1,877	1,034	943	1,977	1,296	1,185	2,481	1,299	1,130	2,429	12,424	11,232	23,656	
27	40,290	Total. { Municipal Towns	19,505	20,785	40,290	29	21	50	30	33	63	25	23	48	34	22	56	354	320	674	
28	1,200,408	Trichinopoly District	588,134	612,274	1,200,408	935	962	1,897	972	995	1,967	1,107	1,127	2,234	1,242	1,257	2,439	11,081	10,885	21,966	
29	1,112,607	{ Taluqs (R. C.)	586,492	577,116	1,163,613	849	877	1,726	894	884	1,778	1,019	1,036	2,055	1,124	1,160	2,284	10,116	9,908	20,024	
30	87,801	Total. { Municipal Towns	43,307	44,494	87,801	86	85	171	78	111	189	88	91	179	118	97	215	965	977	1,942	
31	1,973,731	Tanjore District	953,968	1,019,763	1,973,731	1,924	1,985	3,909	2,023	1,985	4,009	2,086	2,027	4,113	2,202	2,045	4,247	22,460	21,787	44,247	
32	1,789,719	{ Taluqs (R. C.)	866,492	923,227	1,789,719	1,714	1,755	3,469	1,764	1,737	3,501	1,810	1,772	3,582	1,914	1,803	3,717	19,834	19,208	39,042	
33	184,012	Total. { Municipal Towns	87,476	96,536	184,012	210	230	440	259	218	507	276	255	531	288	242	530	2,626	2,579	5,205	

	Madras District ... (Talugs (R. C.) Municipal Towns Zemindaries	1,118,066 628,731 32,764 455,571	1,164,549 628,648 32,088 432,813	2,266,615 1,257,379 64,853 938,384	678 438 53 371	1,460 1,024 129 707	1,016 619 66 331	1,001 628 81 668	2,017 1,202 147 668	741 604 77	708 603 109	1,580 1,567 179	516 798 130	901 784 113	1,817 1,861 386	10,058 6,928 749 8,388	10,378 6,515 715 3,050	11,227 12,283 1,484 6,388
34	Madras District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
35	Madras District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
36	Madras District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
37	Madras District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
38	Tinnevely District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
39	Tinnevely District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
40	Tinnevely District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
41	Kurnool District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
42	Kurnool District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
43	Kurnool District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
44	Kurnool District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
45	Cuddapah District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
46	Cuddapah District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
47	Cuddapah District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
48	Bellary District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
49	Bellary District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
50	Bellary District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
51	Bellary District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
52	North Arcot District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
53	North Arcot District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
54	North Arcot District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
55	North Arcot District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
56	Salem District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
57	Salem District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
58	Salem District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
59	Coimbatore District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
60	Coimbatore District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
61	Coimbatore District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
62	Neelgherry District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
63	Neelgherry District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
64	Neelgherry District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
65	South Canara District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
66	South Canara District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
67	South Canara District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
68	Malabar District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
69	Malabar District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
70	Malabar District ... (Talugs (R. C.) Municipal Towns Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total Madras Presidency ...		15,221,079	15,066,763	30,287,842	21,563	20,861	22,244	20,622	42,866	25,982	23,291	49,273	27,637	24,461	52,098	267,756	245,476	513,232
Ratio per 1,000 of Population ...		...	...	...	1.4	1.3	1.4	1.3	1.4	1.7	1.5	1.6	1.8	1.6	1.7	17.5	16.2	16.9

III.

Deaths registered from different Causes in the Rural Circles and Towns of the Madras Presidency during the year 1873.

No.	Population according to Census of 1871.	Districts.	4	5		6		7		8		9		10											
				Population for which Returns were received.		Cholera.		Small-pox.		Fever.		Bowel-complaints.		Suicide.		Wounding.		Accidents.							
				Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.				
Names of Rural Circles and Towns.																									
Ganjnam.																									
1	158,061	Goomsoor ...	79,300	78,761	158,061	14	20	23	35	58	791	647	1,438	69	45	114	3	4	7	6	3	9	11	5	16
2	222,275	Berhampore ...	109,151	113,124	222,275	5	1	4	8	12	920	772	1,692	48	31	79	2	1	3	2	2	2	16	17	33
3	153,507	Chicacole ...	77,084	76,423	153,507	...	1	72	71	143	764	712	1,476	13	7	20	3	2	5	2	1	2	6	9	15
4	15,587	M. T. Chicacole ...	7,311	8,246	15,587	...	...	9	9	18	72	52	124	5	4	9	...	...	...	...	1	2	4	...	4
5	21,670	M. T. Berhampore ...	10,937	10,733	21,670	...	...	10	4	14	88	94	182	3	1	4	...	...	...	...	1	1	2	...	3
6	817,876	Zemindaries ...	347,431	283,662	631,093	26	30	152	148	300	3,058	2,762	5,820	213	39	252	16	17	33	7	3	10	40	23	63
Total ...			631,013	571,180	1,202,193	45	38	270	275	545	5,693	5,039	10,732	351	127	478	24	24	48	17	9	26	78	56	134
Palcondah ...			73,573	71,480	145,043	...	...	159	130	289	910	705	1,615	11	6	17	4	5	9	4	1	5	11	8	19
7	155,699	Parvatipore ...	64,619	63,104	127,723	...	...	28	25	53	732	531	1,263	18	10	28	6	1	7	2	...	2	19	3	22
8	139,289	Bobbili ...	49,754	47,134	96,888	...	...	74	68	142	439	327	766	7	4	11	...	1	1	1	...	1	13	11	24
9	77,364	Salur ...	35,270	34,751	70,021	...	...	17	18	35	308	224	532	5	14	19	1	1	2	1	1	2	4	...	4
10	117,276	Vizianagaram ...	42,192	39,432	81,624	...	...	35	43	78	379	319	698	12	6	18	7	5	12	...	...	...	10	8	18
11	97,675	Bimalipatam ...	41,284	39,040	80,324	...	...	32	46	78	424	346	770	6	3	9	4	3	7	1	...	...	14	3	17
12	48,637	Vizagapatam ...	23,356	22,469	45,825	...	...	35	23	58	173	161	334	16	8	24	3	10	13	3	3	12	4	16	
13	165,499	Ankapilly ...	64,606	60,057	124,663	...	...	94	130	224	496	414	910	13	14	27	9	9	18	1	...	20	16	36	
14	32,191	M. T. Vizagapatam ...	15,703	16,488	32,191	...	...	38	36	74	121	106	227	19	16	35	1	1	2	1	1	2	19	4	23
15	8,744	M. T. Bimalipatam ...	4,318	4,426	8,744	...	...	2	2	4	21	24	45	28	20	48	...	...	...	...	...	...	1	...	3
16	20,169	M. T. Vizianagaram ...	9,986	10,233	20,169	...	...	11	9	20	215	145	360	14	11	25	4	1	5	...	...	...	...	...	...
17	8,812	M. T. Palcondah ...	4,413	4,399	8,812	...	...	18	18	36	50	63	113	1	1	2	...	1	1	...	...	...	...	...	...
18	837,750	Zemindaries ...	351,125	335,805	686,930	...	...	454	437	891	2,906	2,554	5,460	76	42	118	30	39	69	4	5	9	89	71	160
Total ...			780,149	748,818	1,528,967	...	...	997	985	1,982	7,174	5,919	13,093	226	155	381	69	77	146	18	8	26	213	130	343
Rajahmundry			55,800	53,363	109,163	...	...	110	89	199	655	620	1,275	32	30	62	4	5	9	...	1	1	15	11	26
20	109,163	Peddapore ...	55,388	56,101	111,489	...	...	207	161	368	919	825	1,744	24	24	48	6	11	17	1	1	1	5	4	9
21	111,489	Ramachendrapore ...	102,136	101,447	203,583	...	...	157	141	298	1,164	929	2,093	62	46	108	13	20	33	4	3	7	30	24	54
22	203,583	Amalaspore ...	105,045	101,840	206,885	...	...	191	170	361	859	796	1,655	78	53	131	9	14	23	3	3	6	23	20	43
23	206,885	Narasapore ...	89,768	88,108	177,876	...	...	106	92	198	387	370	757	41	52	93	6	9	15	...	...	...	28	14	42
24	177,876	Ellore ...	56,789	54,599	111,388	...	...	182	184	366	1,015	922	1,937	29	27	56	5	3	8	3	1	4	10	8	18
25	111,388	Undi ...	46,342	46,115	92,457	...	...	95	108	203	284	256	540	43	41	84	3	4	7	...	...	...	3	6	9
26	92,457	Tanuku ...	83,757	83,734	167,491	...	...	79	111	190	940	793	1,733	51	46	97	9	8	17	6	1	7	17	22	39
27	167,491	Venagudiam ...	72,866	72,849	145,715	...	...	379	305	684	1,222	1,001	2,223	58	46	104	7	5	12	5	5	6	27	20	47
28	145,715	M. T. Cocanada ...	9,095	8,744	17,839	...	...	11	17	28	26	13	39	38	41	79	1	...	1	2	1	3	6	1	7
29	17,839	M. T. Rajahmundry ...	10,465	9,283	19,788	...	...	74	91	165	40	39	79	4	...	5	...	2	2	...	...	...	2	2	4
30	19,788	M. T. Ellore ...	13,788	11,699	25,487	...	...	74	91	165	40	39	79	4	...	5	...	2	2	...	...	...	2	2	4
31	25,487	Zemindaries ...	102,874	101,454	203,828	...	...	290	219	509	1,052	999	2,051	37	32	69	9	9	18	6	1	7	16	15	31
Total ...			803,603	789,336	1,592,939	...	...	1,892	1,688	3,570	8,614	7,587	16,201	501	439	940	72	92	164	30	11	41	182	147	329

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III.—(Continued.)
Deaths registered from different Causes in the Rural Circles and Towns of the Madras Presidency during the year 1873.

No.	2	3	4	5		6		7		8		9		10												
				Population for which Returns were received.		Cholera.		Small-pox.		Fevers.		Bowel-complaints.		Suicide.		Wounding.		Accidents.								
				Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.					
Names of Rural Circles and Towns.	141	130,178	Bellary ..	66,704	63,774	130,478	...	44	54	98	299	305	604	71	59	130	1	2	3	1	...	...	...	11	13	24
	142	158,830	Adoni ..	81,390	77,170	158,560	...	155	165	320	351	352	703	113	126	269	1	1	2	1	...	...	...	15	14	29
	143	98,230	Alur ..	51,032	47,178	98,210	...	65	65	130	220	190	410	81	51	138	...	...	...	1	...	...	1	12	7	
	144	137,838	Ghooly ..	71,693	66,145	137,838	...	83	77	160	347	323	670	115	92	207	3	8	11	1	...	...	1	13	14	
	145	117,211	Tad-patry ..	59,915	57,266	117,211	...	38	28	66	86	86	172	81	61	145	...	...	...	3	...	...	1	12	11	
	146	97,843	Anantapore ..	51,095	46,748	97,843	...	68	62	130	199	167	366	19	19	38	...	...	...	1	...	...	3	8	12	
	147	93,424	Hospett... ..	47,605	45,819	93,424	...	23	21	44	733	693	1,426	51	42	93	3	1	4	1	...	...	1	23	13	
	148	120,608	Dharamavaram ..	63,095	57,513	120,608	...	38	27	65	561	539	1,100	48	46	94	...	...	...	4	...	...	1	14	14	
	149	88,754	Pennacundah ..	46,182	42,572	88,754	...	17	23	40	349	302	651	28	23	51	...	...	...	5	...	...	2	11	18	
	150	87,895	Hindupur ..	45,200	42,695	87,895	...	48	46	94	384	413	797	58	45	103	3	3	6	...	...	...	9	19	28	
	151	79,458	Madakasara ..	40,838	38,620	79,458	...	18	6	24	41	48	89	94	107	20	2	8	10	1	...	...	...	1	10	21
	152	87,779	Royadroog ..	45,938	41,841	87,779	...	16	22	38	460	465	925	28	28	56	...	...	...	1	...	...	...	9	3	12
Bellary.	153	93,228	Kudlighee ..	47,351	45,877	93,228	...	31	33	64	328	282	610	46	64	110	...	...	...	1	...	...	...	10	9	19
	154	85,729	Hurpanbully ..	43,947	41,782	85,729	...	34	26	60	88	90	178	54	55	109	1	...	...	1	...	...	1	13	8	
	155	89,538	Huvimbaddully ..	45,536	44,002	89,538	...	91	115	206	91	94	185	184	178	362	2	2	2	2	...	...	3	5	4	
	156	51,766	M. T. Bellary ..	27,185	24,581	51,766	...	1	4	5	92	139	231	38	57	95	3	3	2	3	...	...	7	3	3	
	157	22,723	M. T. Adoni ..	11,600	11,123	22,723	...	2	3	5	113	150	263	18	11	29	1	1	2	1	...	...	1	4	2	
	158	6,730	M. T. Ghooly ..	3,545	3,185	6,730	...	16	11	27	21	34	55	...	2	2	...	...	...	...	...	...	1	1	3	
	159	4,918	M. T. Anantapore ..	2,438	2,480	4,918	...	...	...	...	8	1	9	...	1	2	3	...	...	...	...	...	...	3	2	5
	160	14,996	Zomindaries ..	7,534	7,462	14,996	...	2	2	4	115	110	225	4	4	8	1	1	2	...	...	...	3	2	5	
		1,668,006	Total ..	860,173	807,833	1,668,006	...	790	790	1,580	4,896	4,783	9,669	1,181	1,083	2,264	22	45	67	17	11	28	186	175	361	
	North Arcot.	161	99,628	Chendragherry ..	51,042	48,586	99,628	...	48	63	111	363	319	632	23	17	40	2	2	4	1	1	2	16	25	41
		162	204,101	Wallajahpett ..	103,172	100,929	204,101	...	387	389	776	719	707	1,426	150	119	269	8	8	16	1	3	4	55	71	126
		163	153,507	Wandewash ..	77,197	76,310	153,507	...	306	325	631	377	372	749	100	89	189	6	6	12	8	3	11	71	144	
164		157,391	Arcoot ..	78,564	78,827	157,391	...	292	288	580	439	415	854	154	133	287	10	11	21	3	3	6	25	25	50	
165		141,134	Vellore ..	70,850	70,284	141,134	...	174	170	344	1,948	1,874	3,822	57	50	107	3	7	10	4	3	7	17	27	44	
166		109,150	Polar ..	51,820	54,330	109,150	...	118	131	249	960	945	1,905	40	43	83	4	4	8	1	...	...	1	34	44	
167		162,980	Gudlathum ..	82,466	80,514	162,980	...	198	191	389	1,737	1,698	3,435	55	40	95	8	7	15	3	3	6	27	22	49	
168		203,045	Palmanair ..	30,702	29,509	60,211	...	47	56	103	462	450	912	25	32	57	3	3	6	2	2	4	14	18	32	
169		213,045	Chittoor ..	109,586	103,457	213,045	...	130	153	283	817	693	1,510	58	52	110	8	24	32	3	5	8	41	60	101	
170		38,022	M. T. Vellore ..	18,139	19,883	38,022	...	25	21	46	207	184	391	11	12	23	...	...	...	1	...	...	1	7	3	
171		12,103	W. T. Wallajahpett ..	6,831	6,272	12,103	...	19	20	39	13	12	25	3	3	6	2	1	3	...	...	...	...	4	7	
172		664,006	Zemindaries ..	338,307	325,699	664,006	...	849	894	1,843	3,273	3,109	6,382	322	364	686	14	24	38	10	9	19	146	165	311	
	2,015,278	Total ..	1,020,678	994,600	2,015,278	...	2,593	2,801	5,394	11,315	10,778	22,093	998	954	1,952	68	97	165	37	32	69	456	537	993		

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III.—(Continued.)

Deaths registered from different Causes in the Rural Circles and Towns of the Madras Presidency during the year 1873.

No.	1	2	3	4	5		6		7		8		9		10												
					Population for which Returns were received.		Cholera.		Small-pox.		Fevers.		Bowel-complaints.		Suicide.		Wounding.		Accidents.								
					Districts.	Names of Rural Circles and Towns.	Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.			
204	218,118	122,190	125,928	218,118	...	...	...	...	...	74	51	125	569	520	1,089	155	111	266	6	4	10	1	2	3	24	22	46
205	123,057	60,749	62,308	123,057	...	...	...	...	...	81	52	133	403	350	753	31	19	50	2	1	3	2	...	2	5	4	9
206	125,938	76,228	49,710	125,938	...	...	...	...	...	51	16	67	516	319	895	25	27	52	3	1	4	3	1	4	16	6	22
207	243,751	121,560	122,191	243,751	...	...	...	...	...	152	99	251	651	536	1,187	115	101	216	4	1	5	4	1	5	30	11	41
208	141,806	70,126	71,680	141,806	...	...	...	...	...	250	121	371	524	420	944	107	98	205	3	1	4	4	4	4	14	5	19
209	287,936	145,465	142,471	287,936	...	...	...	...	...	313	196	509	1,105	853	1,958	268	259	527	5	3	8	6	5	11	25	21	46
210	292,482	144,796	147,686	292,482	...	...	...	...	...	225	142	367	1,082	903	1,985	212	191	436	10	5	15	23	3	26	43	44	87
211	5,986	3,142	2,844	5,986	...	...	...	...	...	2	2	4	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...
212	295,103	144,151	150,952	295,103	...	...	...	...	...	428	277	705	962	766	1,728	227	171	401	16	11	27	14	1	15	25	30	55
213	374,756	185,306	189,450	374,756	...	...	...	...	...	1,508	1,099	2,607	483	406	889	478	452	930	6	10	16	5	1	6	30	28	58
214	...	...	...	...	...	...	...	...	...	1	1	2	4	3	7	8	13	21	...	...	...	...	...	...	...	...	...
215	...	...	...	...	...	...	...	...	...	1	1	1	...	1	1	7	8	15	...	...	...	...	...	...	...	...	...
216	20,504	9,847	10,657	20,504	...	...	...	...	...	39	37	76	42	37	79	6	3	9	1	...	1	3	...	3	2	...	2
217	47,962	24,064	23,898	47,962	...	...	...	...	...	169	132	301	36	16	52	35	19	54	1	1	1	5	...	5	7	1	8
218	30,752	15,074	15,678	30,752	...	...	...	...	...	48	33	81	81	95	176	22	31	56	1	...	1	1	1	2	...	5	5
219	13,840	6,985	6,855	13,840	...	...	...	...	...	250	203	453	26	14	40	8	3	11	1	...	1	2	1	3	2	...	2
220	9,259	5,206	4,053	9,259	...	...	...	...	...	45	48	93	55	52	107	29	35	64	...	...	...	1	1	1	3	2	5
	2,261,250	1,134,889	1,126,361	2,261,250	14	8	22	3,637	2,507	6,144	6,569	5,323	11,892	1,763	1,550	3,313	59	37	96	74	16	90	226	179	405		
	30,835,577																										
	Total Madras Presidency	15,221,079	15,066,763	30,287,842	458	382	140	26,733	25,049	51,782	117,387	105,456	223,843	19,726	16,636	36,392	988	1089	2,077	591	327	918	4302	3965	8,267		

III.—(Continued.)
Deaths registered from Different Causes in the Rural Circles and Towns of the Madras Presidency during the year 1873.—(Continued)

1	2	3	4	5			10			10			12			13										
No.	Population according to Census of 1872	Districts.	Name of Rural Circle and Town.	Population for which Returns were received.			Injuries.			All other Causes.			Total Deaths from all Causes.			Ratio of Deaths per 1,000 of Population.										
							Killed by Wild Beasts.																			
				Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injuries.	M.	F.	Total.			
33	106,452	Kistna.	Nundigama	54,164	52,268	106,452	5	3	8	4	1	5	404	333	737	1,265	1,038	2,303	...	1.7	11.7	0.3	0.8	23.3	19.8	21.6
34	83,081		Bezavada	42,134	40,947	83,081	1	...	1	...	...	...	334	288	622	965	751	1,716	...	0.9	10.9	0.5	0.7	22.9	18.3	20.6
35	87,138		Gudiwada	43,473	43,665	87,138	2	4	6	1	...	...	478	398	876	800	656	1,456	...	1.3	4.2	0.5	0.4	18.3	15.0	16.2
36	128,337		Masulipatam	65,479	62,858	128,337	8	3	11	...	1	...	657	574	1,231	1,164	656	2,165	...	2.2	3.6	0.5	0.7	17.7	15.9	16.8
37	169,912		Repali	86,268	83,644	169,912	11	3	14	...	...	...	978	821	1,799	1,578	1,301	2,879	0.3	1.1	3.7	0.3	0.8	18.2	15.6	16.9
38	143,629		Bapetla	73,747	69,882	143,629	2	3	5	...	...	...	560	496	1,056	1,277	1,047	2,324	0.2	1.0	6.7	0.2	0.4	17.3	14.9	16.1
39	120,619		Rajahpet	61,680	58,939	120,619	5	6	11	...	...	...	112	104	216	998	818	1,816	...	1.1	11.5	0.2	0.4	16.1	13.8	15.0
40	64,508		Vennakondah	32,965	31,543	64,508	5	1	6	...	...	...	95	100	195	760	533	1,293	...	0.8	14.6	0.2	0.4	21.2	16.8	19.1
41	120,658		Pulnad	60,658	60,000	120,658	2	9	11	2	...	...	214	143	357	1,441	1,191	2,632	...	1.5	16.5	0.2	0.5	23.7	19.8	21.8
42	101,728		Cresur	52,384	49,344	101,728	3	3	6	...	...	...	203	173	376	958	730	1,688	...	0.5	11.6	0.2	0.5	18.2	14.7	16.5
43	100,964	M. T. Guntoor	Guntoor	55,074	53,860	108,964	2	5	7	...	...	...	416	315	731	1,070	814	1,884	...	1.2	8.2	0.4	0.6	19.4	15.1	17.2
44	18,033		M. T. Guntoor	9,074	8,959	18,033	...	1	1	...	...	...	149	119	268	236	197	433	...	4.2	3.1	1.1	0.6	26.00	21.9	24.01
45	36,188		M. T. Masulipatam.	17,208	18,920	36,188	1	1	2	...	...	...	268	238	506	356	309	665	...	0.8	2.8	0.3	0.3	20.6	16.3	18.3
46	163,127		Zemindaries	83,105	80,020	163,127	8	3	11	...	2	...	344	287	631	1,743	1,466	3,209	...	1.2	13.4	0.3	0.7	20.9	18.3	19.6
Total				737,495	714,879	1,452,374	55	45	100	7	4	11	5,212	4,389	9,601	14,551	11,852	26,403	0.06	1.3	9.2	0.3	0.6	19.7	16.5	18.1
47	195,068	Nellore.	Ongole	98,680	96,388	195,068	3	1	4	1	...	...	448	430	878	1,312	1,169	2,481	...	0.9	6.3	0.3	0.4	13.2	12.2	12.7
48	138,375		Kundakur	70,591	67,784	138,375	...	1	1	...	...	...	278	186	464	887	691	1,578	...	0.3	5.5	0.3	0.4	12.5	10.1	10.4
49	81,336		Kavali	42,011	39,325	81,336	6	2	8	...	1	...	84	85	169	468	390	858	...	0.9	6.5	0.2	0.3	11.3	9.9	10.5
50	149,847		Nellore	75,329	74,518	149,847	16	13	29	...	1	...	600	527	1,127	1,188	1,024	2,212	...	0.2	5.7	0.6	0.5	15.7	13.7	14.7
51	147,141		Gudur	76,637	70,504	147,141	5	6	11	...	...	...	232	214	476	743	719	1,462	...	0.5	6.4	0.3	0.2	9.6	10.1	9.9
52	63,885		Raepore	33,131	30,759	63,885	6	1	7	...	...	...	181	158	339	478	433	911	...	0.3	7.4	0.5	0.5	14.4	14.0	14.3
53	103,802		Atmakur	53,541	50,261	103,802	4	6	10	1	...	...	245	218	463	633	613	1,276	0.4	0.3	5.9	0.4	0.6	12.3	12.1	12.2
54	100,985		Udayagiri	48,466	45,166	93,632	3	3	6	1	...	...	174	141	315	401	342	743	...	0.06	3.06	0.1	0.3	7.6	7.06	7.3
55	127,258		Kanigiri	65,953	61,305	127,258	1	2	3	1	...	...	57	45	102	476	416	892	...	0.1	5.7	0.1	0.2	7.2	6.7	7.00
56	29,922		M. T. Nellore	14,879	15,043	29,922	8	1	4	...	...	...	208	167	373	258	193	451	...	0.1	1.6	0.3	0.4	17.3	12.8	15.07
57	239,192		Zemindaries	124,121	115,071	239,192	16	16	32	...	5	...	928	781	1,709	3,444	3,043	6,487	0.4	1.1	16.2	1.1	0.9	27.7	26.4	27.1
Total				707,392	669,419	1,376,811	63	52	115	4	8	12	3,435	2,982	6,417	10,318	9,033	19,351	0.3	0.5	7.4	0.4	0.5	14.5	13.4	14.05
58	397,552	Madras.	Madras Town	194,676	202,876	397,552	1	...	1	...	...	...	4,272	4,365	8,637	7,208	7,401	14,609	0.01	2.6	6.4	5.4	0.4	37.02	36.4	36.7
59	104,210		Ponary	53,204	51,006	104,210	6	2	8	1	1	...	349	332	681	921	883	1,804	...	1.4	6.1	2.2	0.8	17.3	17.3	17.3
60	149,898		Trivalore	76,983	72,915	149,898	10	8	18	2	1	3	713	712	1,425	1,471	1,539	3,010	...	2.9	5.3	1.6	0.6	19.1	21.1	20.08
61	186,404		Sydapett	93,867	92,547	186,404	6	6	12	5	3	8	763	747	1,510	1,701	1,731	3,432	...	1.9	5.5	2.00	1.06	18.6	18.6	18.6

	Chingleput	Madurantakam	Conjeveram	M. T. Conjeveram	Total	64,675	132,325	20	10	30	2	1	8	684	659	1,343	1,439	1,869	2,858	...	1.9	6.5	1.7	1.2	23.00	31.1	31.5
63	132,325	...	...	...	...	64,675	132,325	20	10	30	2	1	8	684	659	1,343	1,439	1,869	2,858	...	1.9	6.5	1.7	1.2	23.00	31.1	31.5
64	130,709	...	...	...	...	95,855	197,808	14	13	27	1	...	1	904	827	1,781	1,867	1,783	3,660	...	1.7	6.2	0.8	0.7	18.5	18.4	18.4
65	87,327	...	...	...	...	65,568	180,709	14	9	23	1	...	...	187	150	287	418	1,428	2,855	...	8.2	6.02	1.5	0.9	21.7	21.9	21.8
	938,184	...	...	...	...	19,075	97,327	2	...	2	...	...	...	...	...	...	...	...	835	...	8.7	4.8	5.7	0.3	22.9	21.8	22.8
66	239,754	...	...	...	...	482,216	938,184	72	48	120	12	6	18	4,165	4,186	8,301	9,340	9,154	18,494	...	2.2	5.9	1.8	0.8	19.6	19.8	19.7
67	164,657	...	...	...	...	117,342	239,754	27	15	42	...	...	...	650	581	1,231	1,547	1,408	2,950	0.008	1.4	4.3	0.7	0.5	12.6	11.9	12.3
68	236,108	...	...	...	...	83,571	164,657	14	6	20	1	...	...	201	203	404	1,417	1,204	2,621	...	1.4	11.3	0.1	0.4	16.9	14.8	15.9
69	244,559	...	...	...	...	120,178	286,108	19	10	29	3	1	4	427	381	808	1,482	1,278	2,760	0.03	1.05	5.6	0.8	0.6	12.3	11.02	11.6
70	239,183	...	...	...	...	123,269	244,559	18	22	40	...	1	1	610	527	1,137	1,767	1,578	3,340	0.04	0.7	6.6	0.9	0.5	13.3	12.7	13.6
71	178,504	...	...	...	...	116,520	239,183	6	9	15	2	2	4	787	793	1,580	1,780	1,640	3,120	0.06	1.2	4.2	0.6	0.3	14.3	14.6	13.04
72	216,246	...	...	...	...	89,495	175,504	10	6	16	4	...	4	359	354	713	1,428	1,298	2,728	0.08	2.2	8.1	0.5	0.3	15.9	14.5	15.2
73	40,290	...	...	...	...	97,373	196,566	19	5	24	1	...	1	198	208	406	1,094	1,032	2,101	0.01	1.1	6.8	0.2	0.3	11.06	10.3	10.6
74	1,755,317	...	...	...	...	108,599	216,246	19	13	32	1	1	2	787	778	1,565	1,604	1,934	4,088	0.02	2.2	7.2	1.2	0.6	19.1	18.1	18.6
	1,755,317	...	...	...	...	20,785	40,290	3	1	4	...	...	...	224	185	408	354	320	674	...	0.4	8.1	2.3	0.5	18.1	15.3	16.7
75	237,893	...	...	...	...	889,895	1,755,317	135	87	222	12	5	17	4,243	4,010	8,253	12,778	11,552	24,330	0.02	1.4	6.4	0.7	0.4	14.4	13.2	13.8
76	218,960	...	...	...	...	117,895	237,893	17	14	31	2	3	5	639	629	1,268	1,741	1,714	3,455	...	1.00	7.1	0.7	0.2	14.5	14.5	14.5
77	228,313	...	...	...	...	...	218,960	28	18	46	2	2	4	1,025	1,080	2,106	2,138	2,224	4,362	...	1.3	6.8	1.4	0.6	...	...	19.9
78	257,174	...	...	...	...	113,233	238,313	26	9	35	2	...	2	560	513	1,073	1,309	1,213	2,523	...	0.7	3.9	1.2	0.4	11.5	10.5	11.04
79	170,567	...	...	...	...	123,875	257,174	17	22	39	1	1	2	968	995	1,963	2,219	2,177	4,396	...	1.2	6.6	1.05	0.4	17.9	16.3	17.09
80	76,530	...	...	...	...	88,837	170,567	16	5	21	2	1	3	612	528	1,040	1,503	1,436	2,939	...	2.02	8.1	0.5	0.4	17.9	16.5	17.2
81	11,271	...	...	...	...	36,933	76,530	3	1	4	...	...	1	361	375	736	742	744	1,486	...	1.4	3.4	4.5	0.3	20.09	18.7	19.4
	1,200,408	...	...	...	...	...	11,271	22	12	34	...	...	...	305	312	617	1,206	1,144	2,350	...	2.3	4.3	0.7	0.7	...	...	40.4
82	107,459	...	...	...	...	588,134	1,200,408	131	81	212	9	8	17	4,541	4,624	9,165	11,081	10,885	21,966	...	1.3	7.4	1.3	0.5	18.8	17.7	18.2
83	198,193	...	...	...	...	52,720	107,459	12	15	27	...	...	...	769	792	1,551	1,082	1,084	2,166	0.01	1.7	2.3	0.8	0.5	20.6	19.8	20.1
84	207,407	...	...	...	...	96,110	198,193	23	21	49	...	...	...	1,654	1,633	3,287	2,278	2,188	4,461	...	2.02	2.5	0.8	0.5	23.6	21.4	22.5
85	152,208	...	...	...	...	98,561	207,407	20	21	41	...	...	...	1,986	1,832	3,818	2,511	2,274	4,785	0.06	1.7	1.4	0.6	0.7	25.4	20.8	22.0
86	154,714	...	...	...	...	72,379	152,208	11	17	28	...	...	...	1,243	1,310	2,553	1,715	1,798	3,513	0.08	1.8	2.9	0.8	0.7	23.6	22.5	23.0
87	237,423	...	...	...	...	76,177	154,714	20	23	43	...	...	...	1,047	1,071	2,118	1,398	1,426	2,824	...	0.7	2.5	0.5	0.7	18.3	18.1	18.2
88	292,164	...	...	...	...	116,777	237,423	23	14	37	...	...	...	1,613	1,468	2,976	1,977	1,862	3,859	...	1.0	1.6	0.5	0.4	17.0	15.4	16.2
89	143,551	...	...	...	...	141,444	292,164	18	23	41	...	...	...	2,191	2,166	4,347	3,605	3,442	7,047	0.02	2.9	4.4	1.1	0.6	25.4	22.8	24.1
90	52,175	...	...	...	...	68,314	143,551	18	16	34	...	...	...	2,421	2,429	4,850	3,684	3,592	7,276	0.003	2.4	3.9	1.1	0.6	25.5	23.5	24.5
91	44,444	...	...	...	...	25,726	52,175	4	3	7	...	...	...	1,197	1,187	2,384	1,589	1,522	3,111	...	1.9	2.0	0.6	0.5	22.8	20.4	21.6
92	21,165	...	...	...	...	21,669	44,444	3	1	4	...	...	...	542	667	1,109	780	612	1,593	0.08	1.4	5.1	2.0	0.3	30.3	30.7	30.5
93	48,525	...	...	...	...	10,407	21,165	...	...	...	...	...	...	372	382	754	613	616	1,328	...	2.3	4.1	3.9	0.3	28.8	26.9	27.6
94	17,703	...	...	...	...	27,275	48,525	1	...	1	...	...	...	177	181	358	286	280	576	...	1.7	3.3	5.1	0.09	28.4	26.0	27.2
95	1,978,731	...	...	...	...	8,524	17,703	1	...	1	...	...	...	492	464	966	672	628	1,298	0.1	1.3	3.3	1.9	0.1	31.6	22.9	26.7
	1,978,731	...	...	...	...	...	1,978,731	185	179	364	...	...	...	15,775	15,617	31,392	22,460	21,787	44,247	0.02	1.9	2.9	1.0	0.5	23.5	21.3	22.4
96	311,501	...	...	...	...	153,199	311,501	15	15	30	2	1	3	435	425	860	1,771	1,731	3,502	...	1.4	5.6	1.01	0.3	11.5	10.9	11.2
97	128,983	...	...	...	...	65,651	128,983	3	10	18	2	1	3	216	198	414	467	437	894	...	0.4	2.3	0.6	0.2	7.2	6.6	6.9
98	241,215	...	...	...	...	88,326	179,431	10	12	22	3	2	5	338	370	708	1,031	1,014	2,045	...	0.8	4.7	1.3	0.4	11.6	11.1	11.4
99	217,418	...	...	...	...	120,724	241,215	16	12	28	2	1	3	550	522	1,072	1,586	1,469	3,005	0.008	1.2	5.05	1.3	0.3	12.7	12.1	12.4
100	217,418	...	...	...	...	107,073	217,418	16	5	21	4	1	5	184	167	351	1,094	1,094	2,181	...	0.6	6.4	0.9	0.3	10.3	9.9	10.0

139	102,744	50,520	52,324	102,744	4	1	5	...	...	...	65	54	119	608	556	1,144	...	0.4	8.8	0.2	0.4	0.5	11.6	10.5	11.1	
130	98,051	44,984	48,067	93,051	2	4	6	...	...	...	46	55	101	595	454	1,079	...	0.2	9.3	0.4	0.5	12.3	10.7	11.5		
131	76,667	37,417	39,250	76,667	4	3	7	...	...	...	53	68	111	512	415	927	...	0.2	9.4	0.3	0.6	13.04	11.09	12.09		
132	145,180	70,615	74,565	145,180	10	4	14	...	...	...	128	161	279	1,133	1,047	2,180	...	0.4	11.62	0.5	0.5	15.1	14.8	15.01		
133	145,591	70,951	74,640	145,591	7	8	15	...	...	...	120	157	277	1,121	1,099	2,220	...	0.7	11.2	0.6	0.7	15.01	15.4	15.2		
134	128,162	61,856	66,306	128,162	5	11	16	...	...	...	113	131	244	887	743	1,680	...	0.4	8.6	0.6	0.6	12.6	12.01	12.3		
135	135,468	66,366	69,102	135,468	4	7	11	...	...	...	231	223	454	1,231	1,188	2,399	...	1.5	11.02	1.03	0.7	17.8	17.5	17.7		
136	140,948	68,255	72,693	140,948	11	10	21	...	...	...	314	277	591	1,412	1,280	2,692	...	1.7	11.5	0.8	0.7	19.4	18.7	19.09		
137	110,405	63,121	67,284	110,405	6	4	10	...	...	...	124	140	264	956	871	1,827	...	2.2	10.9	0.3	0.6	16.6	16.3	16.5		
138	109,965	53,521	56,444	109,965	3	2	5	...	...	...	192	194	386	857	733	1,640	...	0.8	9.7	0.3	0.5	15.1	14.6	14.9		
139	146,738	72,242	74,496	146,738	...	5	5	...	...	...	162	143	305	857	765	1,622	...	0.4	7.6	0.3	0.4	11.5	10.5	11.05		
140	16,275	7,946	8,329	16,275	1	...	1	...	...	...	125	88	213	333	268	601	...	0.3	21.7	0.6	1.04	39.9	33.7	36.9		
Total																										
141	130,478	63,774	66,701	130,478	1	...	1	...	...	...	683	619	1,302	1,110	1,050	2,160	...	0.7	4.6	0.9	0.1	16.6	16.4	16.5		
142	158,860	77,170	81,690	158,860	10	5	15	...	...	...	1,041	1,095	2,136	1,717	1,759	3,476	...	2.01	4.4	1.6	0.3	21.01	22.7	21.8		
143	98,230	47,178	51,052	98,230	1	1	2	...	...	...	627	601	1,228	1,010	919	1,929	...	1.3	4.1	1.4	0.2	19.7	19.4	19.6		
144	137,838	66,145	71,693	137,838	11	4	15	...	...	...	688	728	1,416	1,261	1,246	2,507	...	1.1	4.8	1.5	0.3	17.5	18.8	18.1		
145	117,211	57,266	59,945	117,211	1	2	3	...	...	...	787	697	1,484	1,006	891	1,897	...	0.5	1.4	1.2	0.2	16.7	15.5	16.1		
146	97,843	46,743	51,095	97,843	4	7	11	...	...	...	527	502	1,029	828	774	1,602	...	1.3	8.7	0.3	0.3	16.2	16.5	16.3		
147	96,424	45,819	47,605	96,424	2	5	7	...	...	...	226	239	465	1,062	1,014	2,076	...	0.4	15.2	0.9	0.5	22.3	22.1	22.2		
148	120,603	57,513	63,095	120,603	6	3	9	...	...	...	368	370	738	1,036	1,004	2,040	...	0.5	9.1	0.7	0.3	16.4	17.4	16.9		
149	88,754	42,572	46,182	88,754	4	...	4	...	...	...	322	316	638	735	687	1,422	...	0.4	7.3	0.5	0.4	15.9	16.1	16.02		
150	87,895	42,695	45,200	87,895	2	3	5	...	...	...	350	320	670	854	849	1,703	...	1.06	9.06	1.1	0.4	18.8	19.8	19.3		
151	79,458	38,620	40,838	79,458	5	1	6	...	...	...	321	385	706	487	560	1,047	...	0.3	1.1	2.5	0.4	11.9	14.5	13.1		
152	87,779	41,841	45,938	87,779	3	...	3	...	...	...	253	234	487	788	758	1,546	...	0.4	10.5	0.8	0.2	17.1	18.1	17.6		
153	93,228	46,877	47,351	93,228	2	4	6	...	...	...	433	397	830	851	790	1,641	...	0.6	6.5	1.1	0.2	17.9	17.2	17.6		
154	85,729	43,947	47,782	85,729	2	2	4	...	...	...	259	205	464	452	386	838	...	0.6	2.07	1.2	0.3	10.2	9.2	9.7		
155	89,538	44,002	45,536	89,538	3	...	3	...	...	...	537	526	1,063	912	921	1,833	...	2.3	2.06	4.04	0.1	20.02	20.9	20.4		
156	51,766	24,581	27,185	51,766	...	...	...	...	...	...	137	175	362	332	336	718	...	0.09	4.4	1.8	0.2	12.2	15.7	13.8		
157	22,723	11,123	11,600	22,723	...	...	...	...	...	...	230	249	479	370	416	786	...	0.2	11.5	1.2	0.4	31.8	37.4	34.5		
158	6,730	3,185	3,545	6,730	...	...	...	...	...	...	38	44	82	76	92	168	...	4.01	1.8	0.2	0.2	21.4	26.8	24.9		
159	4,918	2,480	2,438	4,918	...	...	...	...	...	...	31	44	75	40	50	90	...	...	1.8	0.6	0.6	16.4	20.1	18.3		
160	14,996	7,462	7,534	14,996	2	...	2	...	...	...	30	44	74	157	163	320	...	0.2	15.00	0.5	0.6	20.8	21.8	21.3		
Total																										
161	99,628	48,586	51,042	99,628	2	2	4	...	...	...	322	331	653	779	760	1,539	...	1.1	6.8	0.4	0.5	15.2	15.6	15.4		
162	204,101	100,922	103,172	204,101	8	3	11	...	...	...	772	774	1,546	2,098	2,075	4,173	...	3.8	6.9	1.3	0.7	20.3	20.5	20.4		
163	153,567	76,310	77,197	153,567	9	8	12	...	...	...	967	972	1,939	1,847	1,844	3,691	...	4.1	4.8	1.2	1.1	23.9	24.1	24.04		
164	157,391	78,827	78,564	157,391	7	9	16	...	...	...	964	923	1,887	1,895	1,807	3,702	...	3.6	5.4	1.8	0.5	24.1	22.9	23.5		
165	141,134	70,284	70,850	141,134	2	1	3	...	...	...	279	275	554	2,434	2,407	4,891	...	2.4	27.07	0.7	0.8	35.06	34.2	34.6		
166	109,150	54,330	54,820	109,150	3	1	4	...	...	...	654	663	1,317	1,816	1,832	3,648	...	2.2	17.4	0.7	0.8	33.1	33.7	33.4		
167	162,980	86,514	82,466	162,980	4	9	13	...	...	...	386	372	757	2,418	2,345	4,763	...	2.3	21.07	0.5	0.5	29.3	29.1	29.2		
168	60,211	29,509	30,702	60,211	4	1	5	...	...	...	153	166	339	713	749	1,462	...	1.7	15.1	0.9	0.8	23.3	25.3	24.2		
169	213,045	103,457	103,568	213,045	11	4	15	...	...	...	504	520	1,024	1,572	1,511	3,083	...	1.3	7.07	0.5	0.7	14.3	14.6	14.4		
170	38,022	18,139	18,139	38,022	1	...	1	...	...	...	162	133	295	415	353	768	...	1.2	10.2	0.6	0.4	28.3	17.8	20.1		
171	12,103	6,272	5,831	12,103	...	...	...	...	...	...	166	138	304	206	178	384	...	3.2	2.06	0.4	0.8	35.3	28.3	31.7		
172	664,006	325,699	338,207	664,006	27	20	47	...	...	...	1,868	1,807	3,675	6,518	6,494	13,012	...	2.7	9.6	1.03	0.6	19.2	19.9	19.5		
Total																										
2,015,278																										

III.—(Continued.)
Deaths registered from Different Causes in the Rural Circles and Towns of the Madras Presidency during the year 1873.—(Continued.)

No.	2	3	4	5		10		11		12		13									
				Population for which Returns were received.		Injuries.		All other Causes.		Total Deaths from all Causes.		Ratio of Deaths per 1,000 of Population.									
				Males.	Females.	Total.	Snake-bite.	M.	F.	Total.	M.	F.	Total.	Cholera.	Small-pox.	Fever.	Bowel complaints.	Injuries.	M.	F.	Total.
		Districts.	Name of Rural Circle and Town.																		
	Population according to Census of 1871.																				
173	170,233	Kistnagerry	Kistnagerry	85,032	85,201	170,233	6	3	9	3	4	7	639	584	1,223	1,981	1,811	3,799	23.2	21.3	22.3
174	190,800		Tripattor	93,812	96,988	190,800	8	4	12	2	1	3	760	716	1,476	3,089	3,017	6,106	32.9	31.1	32.002
175	153,801		Uteugherry	75,986	77,815	153,801	5	10	15	3	1	4	668	641	1,309	2,109	1,999	4,108	27.7	25.6	26.7
176	164,006		Athoor	80,256	83,750	164,006	9	10	19	...	...	1	605	543	1,148	2,150	2,100	4,250	26.7	25.07	25.9
177	261,009		Namagal	127,880	133,129	261,009	12	11	23	1	...	...	726	686	1,412	3,380	3,320	6,700	26.4	21.9	25.6
178	343,793		Salem	170,018	173,775	343,793	19	9	28	2	...	2	897	720	1,617	4,274	3,698	7,972	25.1	21.2	23.1
179	249,678		Trichengode	125,220	124,458	249,678	16	15	31	1	...	1	451	471	922	3,050	2,938	5,988	21.3	23.6	23.9
180	190,626		Dharampoory	95,080	95,546	190,626	9	5	14	1	...	1	806	779	1,585	2,509	2,175	4,684	20.3	22.7	24.5
181	193,037		Ossoor	97,276	95,761	193,037	15	6	21	1	2	3	778	748	1,526	2,171	2,047	4,218	22.3	21.3	21.8
182	50,012		M. T. Salem	21,942	25,070	50,012	...	...	...	...	...	...	264	231	495	633	571	1,204	25.3	22.7	24.07
	1,966,995		Total ...	975,502	991,493	1,966,995	99	73	172	14	9	23	6,594	6,119	12,713	25,346	23,683	49,029	25.9	23.8	24.9
183	169,916	Sathernmangalam	Sathernmangalam	84,321	85,595	169,916	7	5	12	7	1	8	221	208	429	1,556	1,307	2,863	18.4	15.2	16.8
184	90,830		Collegal	48,157	42,673	90,830	3	3	6	...	...	...	109	81	190	705	567	1,272	14.6	13.2	14.0
185	102,813		Blowany	51,235	51,578	102,813	7	2	9	3	...	3	190	183	373	964	831	1,795	14.3	13.8	14.4
186	223,363		Perindurai	...	...	223,663	15	8	23	3	1	4	481	362	843	1,932	1,525	3,457	15.4	...	...
187	175,659		Caroor	86,200	89,459	175,659	10	2	12	1	1	2	524	497	1,021	1,194	1,083	2,277	...	...	...
188	217,493		Dharamam	107,881	109,612	217,493	10	6	16	2	2	4	351	329	680	1,128	1,011	2,139	13.8	12.1	12.9
189	123,650		Oodanalapottah	60,462	63,188	123,650	2	2	4	1	...	1	283	284	567	794	718	1,512	10.4	9.2	9.8
190	167,516		Pollachy	82,601	84,912	167,516	10	6	16	1	1	2	352	375	727	1,501	1,403	2,904	13.1	11.3	12.2
191	208,685		Coimbatore	102,514	106,171	208,685	12	2	14	3	1	4	258	232	490	1,250	1,009	2,259	18.1	16.5	17.3
192	237,808		Palladom	117,194	120,614	237,808	8	8	16	1	...	1	325	292	617	1,487	1,291	2,778	12.1	10.7	11.7
193	35,310		M. T. Coimbatore	17,096	18,214	35,310	...	...	...	...	...	...	60	93	153	186	208	394	...	...	...
194	10,201		M. T. Erode	...	...	10,201	...	...	...	...	...	...	40	35	75	113	100	213	...	...	20.8
	1,763,274		Total ...	847,975	888,299	1,763,274	84	45	129	23	7	30	3,214	2,971	6,185	12,810	11,053	23,863	14.6	12.4	13.5
195	36,461	Neigherries.	Neigherries ...	20,269	16,192	36,461	...	...	...	...	...	...	47	52	99	285	206	491	14.0	12.7	13.4
196	9,992		M. T. Ootacamund.	6,265	4,717	9,982	...	...	...	...	...	...	77	94	171	129	153	282	24.5	32.4	28.2
197	8,058		M. T. Coonoor	1,658	1,400	8,058	...	...	...	...	...	...	25	25	50	49	58	107	29.5	41.4	34.9
	49,501		Total ...	27,192	22,309	49,501	...	...	...	...	...	...	149	171	320	463	417	880	17.0	18.6	17.7

IV.
Deaths registered according to Age in the Rural Circles of the Madras Presidency during the year 1873.

1			2							3			
Name of the District.			Born Dead.	Not exceed- ing 1 year.	1 to 6.	6 to 12.	12 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	Above 60.	Total.
Ganjam District	...	...	413	1,996	1,891	985	1,070	1,495	1,288	1,329	1,657	2,108	11,232
Talucs (R. C.)	...	...	287	805	754	411	455	663	529	589	703	934	6,130
Municipal Towns	...	...	12	77	97	42	60	67	71	66	47	166	705
Zemindaries	...	...	114	1,114	1,040	532	555	765	688	674	907	1,008	7,397
Vizagapatam District	...	...	204	2,027	2,730	1,433	1,310	1,941	1,812	1,900	2,295	2,749	18,131
Talucs (R. C.)	...	...	79	1,033	1,824	872	605	972	894	789	1,123	902	9,113
Municipal Towns	...	...	47	329	197	82	151	226	157	145	178	313	1,825
Zemindaries	...	...	78	645	709	479	554	743	791	966	994	1,534	7,193
Godavary District	...	...	496	3,314	4,663	2,227	2,509	3,659	2,697	2,491	3,211	5,955	31,222
Talucs (R. C.)	...	...	413	2,787	3,964	1,904	2,080	3,034	2,199	2,035	2,709	4,925	26,050
Municipal Towns	...	...	45	230	230	90	125	172	135	107	118	410	1,670
Zemindaries	...	...	38	319	469	233	304	453	368	349	384	590	3,502
Kistna District	...	...	271	3,049	4,304	1,982	1,887	2,776	1,831	1,954	2,897	5,452	25,403
Talucs (R. C.)	...	...	230	2,663	3,906	1,599	1,572	2,314	1,527	1,597	2,460	4,528	22,096
Municipal Towns	...	...	24	145	126	40	76	127	82	91	98	289	1,098
Zemindaries	...	...	17	241	572	343	239	335	222	266	339	635	3,209
Nellore District	...	...	257	2,143	2,742	1,065	1,072	1,730	1,520	1,615	2,321	4,856	19,351
Talucs (R. C.)	...	...	164	1,408	1,791	648	671	1,092	971	1,011	1,432	3,225	12,413
Municipal Towns	...	...	8	54	34	17	33	68	41	40	45	111	451
Zemindaries	...	...	85	681	917	400	368	570	508	594	814	1,520	6,487
Madras Town (R. C.)	...	...	264	4,676	1,891	611	723	1,142	912	877	1,102	2,411	14,609
Chingleput District	...	...	686	4,361	3,183	787	690	1,321	1,120	1,179	1,436	3,731	18,494
Talucs (R. C.)	...	...	669	4,096	3,022	752	662	1,255	1,082	1,138	1,383	3,600	17,659
Municipal Towns	...	...	17	265	161	35	28	66	38	41	53	131	835
South Arcot District	...	...	496	4,226	4,148	1,223	1,115	2,008	1,840	1,903	2,338	5,033	24,330
Talucs (R. C.)	...	...	474	4,106	4,069	1,191	1,065	1,938	1,781	1,851	2,279	4,902	23,656
Municipal Towns	...	...	22	120	79	32	50	70	59	62	59	131	674
Trichinopoly District	...	...	633	3,955	3,853	1,113	941	1,684	1,574	1,699	1,881	4,631	21,966
Talucs (R. C.)	...	...	587	3,510	3,526	1,028	837	1,509	1,432	1,512	1,724	4,329	20,024
Municipal Towns	...	...	46	447	327	85	104	175	142	157	157	302	1,912
Tanjore District	...	...	1,743	10,888	5,980	1,607	1,772	1,390	3,214	3,103	3,374	11,176	41,247
Talucs (R. C.)	...	...	1,563	9,433	5,408	1,484	1,513	936	2,794	2,726	2,963	10,222	39,012
Municipal Towns	...	...	180	1,455	572	123	259	454	420	377	411	954	5,205

Madras District	360	2,131	3,662	874	940	1,949	2,044	2,237	2,692	4,368	21,337
Talugs (R. C.)	318	1,863	2,380	643	553	1,186	1,300	1,459	1,741	2,598	18,535
Municipal Towns	23	307	268	59	81	140	101	104	87	286	1,464
Zemindaries	19	461	1,016	273	301	623	643	674	844	1,484	6,388
Tinnevely District	648	4,047	5,239	1,107	1,008	1,787	1,808	2,102	2,343	4,842	24,914
Talugs (R. C.)	573	3,644	4,926	1,040	989	1,677	1,715	1,991	2,253	4,593	23,871
Municipal Towns	75	403	313	67	47	90	93	111	95	249	1,543
Kurnool District	228	1,691	2,369	910	982	1,667	1,505	1,701	2,199	2,810	16,082
Talugs (R. C.)	209	1,560	2,215	875	874	1,519	1,385	1,592	2,072	2,669	14,860
Municipal Towns	19	141	154	35	78	143	120	109	127	241	1,172
Zemindaries	...	...	...	...	...	...	...	...	...	...	...
Cuddapah District	314	2,544	2,060	1,045	1,373	2,396	2,054	2,179	2,666	3,290	19,911
Talugs (R. C.)	314	2,438	2,017	1,022	1,314	2,266	1,997	3,102	2,580	3,270	19,810
Municipal Towns	...	106	43	23	59	180	57	77	86	20	601
Bellary District	600	4,401	5,347	1,566	1,632	3,343	2,621	2,627	2,963	4,699	29,799
Talugs (R. C.)	518	3,960	4,943	1,435	1,580	3,136	2,460	2,497	2,795	4,403	27,717
Municipal Towns	82	370	342	69	90	175	124	103	135	272	1,762
Zemindaries	...	81	62	12	12	32	37	27	33	24	320
North Arcot District	810	9,121	7,749	1,991	2,399	3,932	3,734	3,136	3,867	8,317	45,116
Talugs (R. C.)	547	6,373	5,490	1,300	1,643	2,706	2,626	1,987	2,434	5,846	30,952
Municipal Towns	28	212	161	51	72	123	80	72	94	254	1,152
Zemindaries	235	2,536	2,098	640	684	1,168	1,028	1,077	1,339	2,217	13,012
Salem District	816	8,337	9,152	3,664	2,626	4,272	4,266	4,201	4,614	7,081	49,029
Talugs	796	8,068	8,814	3,612	2,554	4,196	4,208	4,127	4,543	6,907	47,825
Municipal Towns	20	269	338	52	72	76	58	74	71	174	1,204
Coimbatore District	293	3,385	4,446	1,677	1,226	2,100	2,256	2,335	2,403	3,743	23,863
Talugs (R. C.)	283	3,220	4,338	1,639	1,198	2,035	2,215	2,307	2,381	3,640	23,256
Municipal Towns	10	165	108	38	28	65	41	28	22	102	607
Nilgerry District	8	187	115	59	66	115	115	70	59	86	880
Talugs (R. C.)	...	75	58	36	40	75	81	39	35	52	491
Municipal Towns	...	112	57	23	26	40	34	31	24	34	389
South Canara District	555	2,248	1,594	572	826	1,433	1,374	1,320	1,305	1,966	13,243
Talugs (R. C.)	534	2,104	1,439	549	792	1,423	1,315	1,276	1,253	1,894	12,638
Municipal Towns	21	144	95	23	34	61	59	44	52	72	605
Malabar District	665	3,530	5,867	1,934	2,212	4,530	4,563	3,510	2,863	6,094	35,823
Talugs (R. C.)	506	2,910	5,086	1,705	1,920	4,108	4,175	3,277	2,644	5,635	31,966
Municipal Towns	159	620	781	229	292	472	393	233	219	459	3,857
Total Madras Presidency	10,760	82,269	82,985	28,532	28,347	46,800	44,133	43,498	50,481	95,387	513,232

V.
Deaths registered according to Classes in the Rural Circles and Towns of the Madras Presidency during the year 1873.

1	2	3	4				5				6						
No.	Population according to Census of 1872.	Name of the District.	Population for which Returns were received.				Number of Deaths registered.				Ratio of Deaths per 1,000 of Population.						
			Chris- tians.	Maho- medans.	Hin- dus.	Other Classes.	Total.	Chris- tians.	Maho- medans.	Hin- dus.	Other Classes.	Total.	Chris- tians.	Maho- medans.	Hin- dus.	Other Classes.	Total.
1	1,388,976	Ganjam District ...	766	4,026	1,196,988	413	1,202,193	15	55	14,162	...	14,232	19-5	18-6	11-8	...	11-8
2	533,843	{ Taluqs (R. C.) ...	191	785	532,992	324	534,292	9	27	6,094	...	6,130	47-1	34-3	11-4	...	11-4
3	37,257	{ Municipal Towns ...	566	2,488	31,200	8	37,257	5	21	679	...	705	8-8	8-4	19-8	...	18-9
4	817,876	{ Zemindaries ...	9	753	629,796	86	630,644	1	7	7,389	...	7,397	111-1	9-2	11-7	...	11-7
5	1,844,711	Vizagapatam District ...	1,975	20,798	1,505,638	556	1,528,967	72	242	18,117	...	18,431	36-4	11-6	12-07	...	12-05
6	937,045	{ Taluqs (R. C.) ...	447	8,413	782,962	299	772,121	9	51	9,053	...	9,113	20-1	6-06	11-8	...	11-7
7	69,916	{ Municipal Towns ...	1,291	4,600	63,828	197	69,916	63	162	1,600	...	1,825	48-7	35-2	25-06	...	26-1
8	837,750	{ Zemindaries ...	237	7,785	678,848	60	686,930	...	29	7,464	...	7,493	...	3-7	10-9	...	10-9
9	1,592,939	Godavery District ...	1,421	35,173	1,556,020	325	1,592,939	26	541	30,655	...	31,222	18-2	15-3	19-7	...	19-6
10	1,326,047	{ Taluqs (R. C.) ...	536	16,276	921,007	196	938,015	15	305	25,730	...	26,050	27-9	18-7	27-9	...	27-7
11	63,064	{ Municipal Towns ...	775	7,270	51,973	46	63,064	10	191	1,469	...	1,670	12-9	26-2	26-7	...	26-4
12	203,828	{ Zemindaries ...	110	11,627	580,040	83	591,860	1	45	3,456	...	3,502	9-09	3-8	5-9	...	5-9
13	1,452,374	Kistna District ...	7,665	78,941	1,365,709	59	1,452,374	176	1,087	25,140	...	26,403	22-9	13-7	18-4	...	18-1
14	1,235,026	{ Taluqs (R. C.) ...	6,895	60,531	1,031,581	34	1,099,041	162	889	21,045	...	22,096	23-4	14-6	20-4	...	20-1
15	54,221	{ Municipal Towns ...	473	7,811	45,916	21	54,221	8	139	951	...	1,098	16-9	17-7	20-7	...	20-2
16	163,127	{ Zemindaries ...	297	10,599	288,212	4	299,112	6	59	3,144	...	3,209	20-2	5-5	10-9	...	10-7
17	1,376,811	Nellore District ...	2,991	65,670	1,308,014	136	1,376,811	40	617	18,694	...	19,351	13-3	9-3	14-4	...	14-05
18	1,107,697	{ Taluqs (R. C.) ...	986	40,460	825,358	118	866,922	12	384	12,017	...	12,413	12-1	9-4	14-5	...	14-3
19	29,922	{ Municipal Towns ...	627	4,740	24,545	10	29,922	7	74	370	...	451	11-1	15-6	15-07	...	15-07
20	239,192	{ Zemindaries ...	1,378	20,470	458,111	8	479,967	21	159	6,307	...	6,487	15-2	7-7	13-7	...	13-5
21	397,552	Madras Town (R. C.) ...	37,067	50,964	308,611	910	397,552	827	1,839	11,943	...	14,609	22-3	36-08	38-7	...	36-7
22	938,184	Chingieput District ...	15,141	23,192	899,833	18	938,184	121	271	18,102	...	18,494	7-9	11-6	20-1	...	19-7
23	900,857	{ Taluqs (R. C.) ...	15,120	22,077	863,642	18	900,857	120	256	17,283	...	17,659	7-9	11-5	20-01	...	19-6
24	37,327	{ Municipal Towns ...	21	1,115	36,191	...	37,327	1	15	819	...	835	47-6	13-4	22-3	...	22-3
25	1,755,817	South Arcot District ...	30,712	44,567	1,680,323	215	1,755,817	258	457	23,615	...	24,330	8-4	10-2	14-05	...	13-8
26	1,715,527	{ Taluqs (R. C.) ...	29,407	42,641	1,643,264	215	1,715,527	239	428	22,989	...	23,656	8-1	10-03	13-9	...	13-7
27	40,290	{ Municipal Towns ...	1,305	1,926	37,059	...	40,290	19	29	626	...	674	14-5	15-05	16-8	...	16-7
28	1,200,408	Trichinopoly District ...	52,075	32,024	1,115,919	390	1,200,408	833	386	20,747	...	21,966	15-9	12-05	18-5	...	18-2
29	1,112,607	{ Taluqs (R. C.) ...	...	...	...	...	1,112,607	631	205	19,188	...	20,024	...	...	...	...	18-0
30	87,801	{ Municipal Towns ...	...	...	...	...	87,801	202	181	1,559	...	1,942	...	...	...	...	22-1

[illegible]

VI.

Deaths registered from Cholera in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873.

No.	Population according to Census of 1871.	Districts.	Names of Rural Circles and Towns.	Population for which Returns were received.		January.		February.		March.		April.		May.		June.	
				Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.
1	158,061	{	Goomsoor ...	79,800	78,761	158,061	...	...	...	...	...	...	...	1	...	...	...
2	222,275		Berhampore ...	109,124	113,151	222,275	...	...	...	...	...	...	...	1	...	...	...
3	153,507		Chicacole ...	77,084	76,423	153,507	...	...	...	...	...	...	...	...	...	...	...
4	15,587		M. T. Chicacole	7,341	8,246	15,587	...	...	...	...	...	...	...	...	...	...	...
5	21,670		M. T. Berhampore	10,733	10,937	21,670	...	...	...	...	...	...	...	...	...	...	...
6	817,876		Zemindaries ...	347,431	283,662	631,093	...	...	...	...	...	...	...	...	...	...	...
	1,398,976		Total ...	631,013	571,180	1,202,193	...	...	...	...	...	...	...	...	...	...	...
7	155,699	{	Palcondah ...	73,573	71,480	145,053	...	...	...	...	...	...	...	...	...	...	...
8	135,606		Parvatipore ...	64,619	63,104	127,723	...	...	...	...	...	...	...	...	...	...	...
9	139,289		Bobbili ...	49,754	47,134	96,888	...	...	...	...	...	...	...	...	...	...	...
10	77,364		Salur ...	35,270	34,751	70,021	...	...	...	...	...	...	...	...	...	...	...
11	117,276		Vizianagrum ...	42,192	39,432	81,624	...	...	...	...	...	...	...	...	...	...	...
12	97,675		Bimlipatam ...	41,284	39,040	80,324	...	...	...	...	...	...	...	...	...	...	...
13	48,637	{	Vizagapatam ...	23,356	22,469	45,825	...	...	...	...	...	...	...	...	...	...	...
14	165,499		Ankapilly ...	64,606	60,057	124,663	...	...	...	...	...	...	...	...	...	...	...
15	32,191		M. T. Vizagapatam	15,703	16,488	32,191	...	...	...	...	...	...	...	...	...	...	...
16	8,744		M. T. Bimlipatam	4,318	4,426	8,744	...	...	...	...	...	...	...	...	...	...	...
17	20,169		M. T. Vizianagrum	9,936	10,233	20,169	...	...	...	...	...	...	...	...	...	...	...
18	8,812		M. T. Palcondah	4,413	4,399	8,812	...	...	...	...	...	...	...	...	...	...	...
19	837,750		Zemindaries ...	351,125	335,905	686,930	...	...	...	...	...	...	...	...	...	...	...
	1,844,711		Total ...	780,149	748,818	1,528,967	...	...	...	...	...	...	...	...	...	...	...
20	109,163	{	Rajahmundry ...	55,800	53,363	109,163	...	...	...	...	...	...	...	...	...	...	...
21	111,489		Peddapore ...	55,388	56,101	111,489	...	...	...	...	...	...	...	...	...	...	...
22	203,583		Ramachendrapore	102,136	101,447	203,583	...	...	...	...	...	...	...	...	...	...	...
23	206,885		Amalapore ...	105,045	101,840	206,885	...	...	...	...	...	...	...	...	...	...	...
24	177,876		Narasapore ...	89,768	88,108	177,876	...	...	...	...	...	...	...	...	...	...	...
25	111,388		Ellore ...	56,789	54,599	111,388	...	...	...	...	...	...	...	...	...	...	...
26	92,457	{	Undi ...	46,312	46,115	92,427	...	...	...	...	...	...	...	...	...	...	...
27	167,491		Tanuku ...	83,757	83,734	167,491	...	...	...	...	...	...	...	...	...	...	...
28	145,715		Yernagudem ...	72,866	72,849	145,715	...	...	...	...	...	...	...	...	...	...	...
29	17,839		M. T. Cocanada	9,095	8,744	17,839	...	...	...	...	...	...	...	...	...	...	...
30	19,738		M. T. Rajahmundry	10,455	9,283	19,738	...	...	...	...	...	...	...	...	...	...	...
31	25,487		M. T. Ellore	13,788	11,699	25,487	...	...	...	...	...	...	...	...	...	...	...
32	203,828		Zemindaries ...	102,374	101,454	203,828	...	...	...	...	...	...	...	...	...	...	...
	1,592,939		Total ...	803,603	789,336	1,592,939	...	...	...	...	...	...	...	...	...	...	...

No deaths from cholera.

No deaths from cholera.

VI.—(Continued.)
Deaths registered from Cholera in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873.

No.	Population according to Census of 1871.	Districts.	Names of Rural Circles and Towns.	Population for which Returns were received.		January.		February.		March.		April.		May.		June.	
				Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.
72	196,566	S. Arcot.	Kallacoorchi ..	99,373	97,193	196,566	...	...	...	...	...	...	...	...	...	1	...
73	216,246		Yellavanasoor ..	109,599	106,647	216,246	...	...	...	...	...	...	...	...	...	...	...
74	40,290		M. T. Cuddalore ..	19,505	20,715	40,290	...	...	...	...	...	...	...	...	...	...	...
	1,755,817		Total ..	885,922	869,895	1,755,817	8	2	10	4	2	6	1	1	2	1	5
75	237,898	Trichinopoly.	Woodiarpolliem ..	119,998	117,895	237,893	...	...	...	...	...	...	...	...	...	...	...
76	218,660		Trichinopoly ..	...	...	218,660	...	...	...	...	...	...	...	...	...	...	...
77	228,813		Kullitalai ..	113,238	115,080	228,313	...	...	...	...	...	...	...	...	...	...	...
78	257,174		Mooseri ..	123,875	133,299	257,174	...	...	...	...	...	...	...	...	...	...	...
79	170,567		Perambalure ..	83,837	86,730	170,567	...	...	...	...	...	...	...	...	...	...	...
80	76,530		M. T. Trichinopoly ..	36,933	39,597	76,530	...	...	...	...	...	...	...	...	...	...	...
81	11,271		M. T. Sreerungum ..	...	...	11,271	...	...	...	...	...	...	...	...	...	...	...
	1,200,408		Total ..	588,134	612,274	1,200,408	...	...	...	...	...	...	...	...	...	...	...
82	107,459	Tanjore.	Sheally ..	52,720	54,739	107,459	...	...	...	...	...	...	...	...	...	...	...
83	198,193		Mayaveram ..	96,110	102,083	198,193	...	...	...	...	...	...	...	...	...	...	...
84	207,407		Nannilum ..	98,551	108,856	207,407	...	...	...	...	...	...	...	...	...	...	...
85	152,208		Negepatam ..	72,379	79,829	152,208	...	...	...	...	...	...	...	...	...	...	...
86	154,714		Trirapoondy ..	76,177	78,537	154,714	...	...	...	...	...	...	...	...	...	...	...
87	237,423		Puttucottah ..	115,777	121,646	237,423	...	...	...	...	...	...	...	...	...	...	...
88	292,164		Tanjore ..	141,444	150,720	292,164	...	...	...	...	...	...	...	...	...	...	...
89	298,590		Combacanum ..	144,020	154,570	298,590	...	...	...	...	...	...	...	...	...	...	...
90	143,561		Manargoody ..	69,314	74,247	143,561	...	...	...	...	...	...	...	...	...	...	...
91	52,175		M. T. Tanjore ..	25,726	26,449	52,175	...	...	...	...	...	...	...	...	...	...	...
92	44,444		M. T. Combacanum ..	21,569	22,875	44,444	...	...	...	...	...	...	...	...	...	...	...
93	21,165		M. T. Mayaveram ..	10,407	10,758	21,165	...	...	...	...	...	...	...	...	...	...	...
94	48,525		M. T. Negepatam ..	21,250	27,275	48,525	...	...	...	...	...	...	...	...	...	...	...
95	17,703		M. T. Mannargoody ..	8,524	9,179	17,703	...	...	...	...	...	...	...	...	...	...	...
	1,973,731		Total ..	953,968	1,019,763	1,973,731	...	...	...	...	...	...	...	...	...	...	...
96	311,501	Madura.	Dindigul ..	153,199	158,302	311,501	...	...	...	...	...	...	...	...	...	...	...
97	128,983		Meylur ..	63,382	65,601	128,983	...	...	...	...	...	...	...	...	...	...	...
98	179,431		Madura ..	86,326	91,106	177,431	...	...	...	...	...	...	...	...	...	...	...
99	241,215		Tirumungalam ..	120,724	120,491	241,215	...	...	...	...	...	...	...	...	...	...	...
100	217,418		Peracolum ..	107,073	110,345	217,418	...	...	...	...	...	...	...	...	...	...	...
101	184,831		Palni ..	91,077	93,754	184,831	...	...	...	...	...	...	...	...	...	...	...
102	...		Settanandel Villages ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...
103	51,987		M. T. Madura ..	26,224	25,763	51,987	...	...	...	...	...	...	...	...	...	...	...
104	12,866		M. T. Dindigul ..	6,540	6,325	12,865	...	...	...	...	...	...	...	...	...	...	...

No deaths from Cholera.

[illegible]

VI.—(Continued.)

Deaths registered from Cholera in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873.

No.	Population according to Census of 1871.	Districts.	Names of Rural Circles and Towns.	Population for which Returns were received.			January.			February.			March.			April.			May.			June.		
				Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.			
144	137,838	Bellary.—(Continued.)	Ghooly ...	71,698	66,145	137,838	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...			
145	117,211		Tadpatri ...	59,945	57,266	117,211																		
146	97,843		Anantapur ...	51,095	46,748	97,843																		
147	93,424		Hospett ...	47,605	45,819	93,424																		
148	120,608		Dharmavaram ...	63,095	57,513	120,608																		
149	88,754		Pennakondah ...	46,182	42,572	88,754																		
150	87,895		Hindupur ...	45,200	42,695	87,895																		
151	79,458		Madakesara ...	40,838	38,620	79,458																		
152	87,779		Royadroog ...	45,938	41,841	87,779																		
153	93,228		Kudlighi ...	47,351	45,877	93,228																		
154	85,729		Hirpunnully ...	43,947	41,782	85,729																		
155	89,538		Huvnehadgally ...	45,536	44,002	89,538																		
156	51,766		M. T. Bellary ...	27,185	24,581	51,766																		
157	22,723		M. T. Adoni ...	11,600	11,123	22,723																		
158	6,730		M. T. Ghooly ...	3,545	3,185	6,730																		
159	4,918		M. T. Anantapur ...	2,438	2,480	4,918																		
160	14,996		Zemindaries ...	7,534	7,462	14,996																		
	1,668,006		Total ...	860,178	807,833	1,668,006																		
161	99,628	North Arcot.	Chendraghiri ...	51,042	48,586	99,628	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...			
162	204,101		Wallajahpett ...	103,172	100,929	204,101																		
163	153,507		Wandewash ...	77,197	76,310	153,507																		
164	157,391		Arcot ...	78,564	78,827	157,391																		
165	141,134		Vellore ...	70,850	70,284	141,134																		
166	109,150		Polar ...	54,820	54,390	109,150																		
167	162,980		Gudathum ...	82,466	80,514	162,980																		
168	60,211		Palmanair ...	30,702	29,509	60,211																		
169	213,045		Chittoor ...	109,588	103,457	213,045																		
170	38,022		M. T. Vellore ...	18,139	19,883	38,022																		
171	12,103	Tern.	M. T. Wallajahpett ...	5,831	6,272	12,103	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...			
172	664,006		Zemindaries ...	338,307	325,699	664,006																		
	2,015,278		Total ...	1,020,678	994,600	2,015,278																		
173	170,233	Tern.	Kistnagerry ...	85,032	85,201	170,233	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
174	190,800		Tripataoor ...	93,812	96,988	190,800																		
175	153,801		Uttingerry ...	76,996	77,815	153,801																		
176	164,006		Athoor ...	80,266	83,750	164,006																		
177	261,009		Namasul ...	127,890	133,129	261,009																		
178	343,783		Salem ...	170,018	173,775	343,783																		

No deaths from cholera.

[illegible]

VI.—(Continued.)
Deaths registered from Cholera in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873.

No.	Population according to Census of 1871.	Districts.	Names of Rural Circles and Towns.	Population for which Returns were received.			January.			February.			March.			April.			May.			June.		
				Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
211	5,986	Malabar.—(Contd.)	Cochin ...	3,142	2,844	5,986	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
212	295,103		Palghat...	144,151	150,952	295,103	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
213	374,756		Ponnani ...	185,806	189,450	374,756	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
214	...		Anjengo ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
215	...		Tangacherry	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
216	20,504		M. T. Tellicherry	9,847	10,657	20,504	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
217	47,962		M. T. Calicut...	24,064	23,898	47,962	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
218	80,752		M. T. Palghat	15,074	15,678	30,752	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
219	13,840		M. T. Cochin ...	6,985	6,855	13,840	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
220	9,259		M. T. Cannanore	5,206	4,053	9,259	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	2,261,250		Total ...	1,134,889	1,126,361	2,261,250	1	...	1	...	...	...	1	...	...	6	5	11	3	6	9	...	...	...
	30,885,577		Total Madras Presidency ...	15,221,079	15,066,763	30,287,842	196	175	371	101	65	166	12	12	27	13	10	23	18	28	46	10	19	29

VI.—(Continued.)
Deaths registered from Cholera in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1878.

No.	Population according to Census of 1871.	Districts.	Names of Rural Circles and Towns.	Population for which Returns were received.		July.			August.			September.			October.			November.			December.			Total.		
				Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.		
1	158,061	Ganjam.	Goomsoor	79,300	78,761	158,061	6	1	7	2	2	...	...	...	...	...	...	...	...	...	...	...	14	6	20	
2	222,275		Berhampore	109,124	113,151	222,275	1	...	1	2	1	3	...	...	...	...	...	...	...	...	...	...	5	1	6	
3	153,507		Chicoole	77,084	76,423	153,507	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	
4	15,587		M. T. Chicoole	7,341	8,246	15,587	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
5	21,670		M. T. Berhampore	10,733	10,937	21,670	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
6	817,876		Zemindaries	347,431	283,662	631,093	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	26	30	56	
	1,888,976		Total...	631,013	571,180	1,202,193	9	1	10	2	3	5	...	...	...	...	...	...	...	...	...	45	38	83		
7	155,699	Vizagapatnam.	Paloondah	73,673	71,490	145,053	No deaths from cholera.																			
8	135,606		Parvatipore	64,619	63,104	127,723																				
9	139,289		Bobbili	49,754	47,134	96,888																				
10	77,364		Salur	35,270	34,751	70,021																				
11	117,276		Vizianagrum	42,192	39,432	81,624																				
12	97,675		Bimlipatam	41,284	39,040	80,324																				
13	48,637		Vizagapatnam	23,356	22,469	45,825																				
14	165,499		Ankapilly	64,606	60,057	124,663																				
15	32,191		M. T. Vizagapatnam	15,703	16,488	32,191																				
16	8,744		M. T. Bimlipatam	4,318	4,426	8,744																				
17	20,169		M. T. Vizianagrum	9,936	10,233	20,169																				
18	8,812		M. T. Paloondah	4,413	4,399	8,812																				
19	837,750		Zemindaries	351,125	335,905	686,930																				
	1,844,711		Total...	780,149	743,818	1,523,967																				
20	109,163	Godavery.	Rajshmundry	55,800	53,363	109,163	No deaths from cholera.																			
21	111,489		Peddapore	55,388	56,101	111,489																				
22	203,583		Ramachendrapore	102,136	101,447	203,583																				
23	206,886		Amalapore	105,045	101,840	206,885																				
24	177,876		Narasapore	89,768	88,108	177,876																				
25	111,388		Ellore	56,789	54,599	111,388																				
26	92,457		Undi	46,343	46,116	92,457																				
27	167,491		Tanuku	83,757	83,734	167,491																				
28	145,715		Yernagudem	72,866	92,849	145,715																				
29	17,839		M. T. Cocanada	9,095	8,744	17,839																				
30	19,738		M. T. Rajshmundry.	10,455	9,283	19,738																				
31	25,487		M. T. Ellore	13,788	11,699	25,487																				
32	208,828		Zemindaries	102,374	101,454	203,828																				
	1,592,939		Total...	803,603	789,336	1,592,939																				

VI.—(Continued.)
Deaths registered from Cholera in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873.

No.	Population according to Census of 1871.	District.	Names of Rural Circle and Town.	Population of which Returns were received.		July.		August.		September.		October.		November.		December.		Total.	
				Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	F.
33	106,452	Kistna.	Nundigama ...	54,184	52,268	106,452	...	...	...	...	...	...	...	...	...	...	...	...	...
34	83,081		Bezwa ...	42,134	40,947	83,081	...	...	...	...	...	...	...	...	...	...	...	...	...
35	87,337		Gudiwada ...	43,473	43,865	87,338	...	...	...	...	...	...	...	...	...	...	...	...	...
36	128,337		Masulipatam ...	65,479	62,858	128,337	...	...	...	...	...	...	...	...	...	...	...	...	...
37	169,912		Repalli ...	86,288	83,644	169,912	...	...	...	...	...	...	...	...	...	...	...	...	...
38	143,629		Bapatla ...	73,747	69,882	143,629	...	...	...	...	...	...	...	...	...	...	...	...	...
39	120,619		Rajahpett ...	61,680	58,939	120,619	...	...	...	...	...	...	...	...	...	...	...	...	...
40	64,508		Vennakondah ...	32,965	31,543	64,508	...	...	...	...	...	...	...	...	...	...	...	...	...
41	120,658		Palnad ...	60,658	60,000	120,658	...	...	...	...	...	...	...	...	...	...	...	...	...
42	101,728		Crosur ...	52,384	49,344	101,728	...	...	...	...	...	...	...	...	...	...	...	...	...
43	108,694		Guntoor ...	55,074	53,890	108,964	...	...	...	...	...	...	...	...	...	...	...	...	...
44	18,033		M. T. Guntoor ...	9,074	8,959	18,033	...	...	...	...	...	...	...	...	...	...	...	...	...
45	86,188		M. T. Masulipatam ...	17,268	18,920	36,188	...	...	...	...	...	...	...	...	...	...	...	...	...
46	163,127		Zemindaries ...	83,107	80,020	163,127	...	...	...	...	...	...	...	...	...	...	...	...	...
	1,452,374		Total ...	737,495	714,879	1,452,374	...	...	...	...	...	...	...	...	...	...	...	...	...
47	195,068	Nellore.	Ongole ...	98,680	96,388	195,068	...	...	...	...	...	...	...	...	...	...	...	...	...
48	138,375		Kudankur ...	70,591	67,784	138,375	...	...	...	...	...	...	...	...	...	...	...	...	...
49	81,336		Kavali ...	42,011	39,325	81,336	...	...	...	...	...	...	...	...	...	...	...	...	...
50	149,847		Nellore ...	75,329	74,518	149,847	...	...	...	...	...	...	...	...	...	...	...	...	...
51	147,141		Gudur ...	76,637	70,504	147,141	...	...	...	...	...	...	...	...	...	...	...	...	...
52	63,985		Raipur ...	33,131	30,754	63,885	...	...	...	...	...	...	...	...	...	...	...	...	...
53	103,802		Atmakur ...	53,541	50,261	103,802	...	...	...	...	...	...	...	...	...	...	...	...	...
54	100,985		Udayagiri ...	52,519	48,466	100,985	...	...	...	...	...	...	...	...	...	...	...	...	...
55	127,258		Kangiri ...	65,953	61,305	127,258	...	...	...	...	...	...	...	...	...	...	...	...	...
56	29,922		M. T. Nellore ...	14,879	15,043	29,922	...	...	...	...	...	...	...	...	...	...	...	...	...
57	239,192		Zemindaries ...	124,121	115,071	239,192	...	...	...	...	...	...	...	...	...	...	...	...	...
	1,376,811		Total ...	707,392	669,419	1,376,811	...	...	...	...	...	...	...	...	...	...	...	...	...
58	897,552	Madra	Madras Town	194,676	202,876	397,552	...	...	...	...	...	...	...	...	...	...	...	...	...
59	104,210		Ponnery ...	53,204	51,006	104,210	...	...	...	...	...	...	...	...	...	...	...	...	...
60	149,898	Chingleput.	Trivellore ...	76,963	72,916	149,898	...	...	...	...	...	...	...	...	...	...	...	...	...
61	186,404		Sydepett ...	93,857	92,546	186,404	...	...	...	...	...	...	...	...	...	...	...	...	...
62	182,323		Chingleput ...	67,653	64,675	132,328	...	...	...	...	...	...	...	...	...	...	...	...	...
63	187,308		Madarantakum ...	100,453	96,855	197,308	...	...	...	...	...	...	...	...	...	...	...	...	...
64	130,709		Conjeveram ...	65,566	65,143	130,709	...	...	...	...	...	...	...	...	...	...	...	...	...
65	37,327		M. T. Conjeveram.	18,252	19,075	37,327	...	...	...	...	...	...	...	...	...	...	...	...	...
	938,184		Total ...	475,968	462,216	938,184	...	...	...	...	...	...	...	...	...	...	...	...	...

No deaths from cholera.

[illegible]

VI.—(Continued.)

Deaths registered from Cholera in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873.

No.	Population according to Census of 1871.	Districts.	Names of Rural Circles and Towns.	Population for which Returns were received.		July.			August.			September.			October.			November.			December.			Total.		
				Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.		
105	504,131	Madras (Contd.)	Rannad Zemindary	246,574	257,557	504,131	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
106	434,253		Shevaguanga do.	208,997	225,256	434,253	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	2,266,615		Total	1,112,066	1,154,549	2,266,615	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
107	176,954	Tinnevely.	Streevilliputtur	88,263	88,691	176,954	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
108	156,862		Satur	78,467	78,395	156,862	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
109	285,811		Ottapidaram	142,862	142,949	285,811	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
110	234,346		Tenkarai	112,704	121,642	234,346	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
111	178,078		Nangunery	87,025	91,053	178,078	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
112	163,215		Ambasamudram	77,640	85,575	163,215	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
113	122,001		Tenkasi	61,010	60,991	122,001	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
114	182,018		Sunkaranainar Covil	90,214	91,804	182,018	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
115	145,120		Tinnevely	73,651	71,469	145,120	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
116	21,044		M. T. Tinnevely	10,549	10,495	21,044	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
117	17,945		M. T. Palamcottah	8,847	9,098	17,945	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
118	10,565		M. T. Tuticorin	5,283	5,282	10,565	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	1,693,959		Total	836,515	857,444	1,693,959	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
119	101,866	Kurnool.	Nundikotkur	52,269	49,597	101,866	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
120	92,665		Marakapur	47,213	45,452	92,665	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
121	115,747		Cumbum	58,765	56,982	115,747	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
122	71,066		Servelli	36,249	34,817	71,066	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
123	98,814		Koilkuntla	49,984	48,860	98,844	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
124	173,434		Puttikondah	89,868	83,566	173,434	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
125	120,616		Ramalcottah	62,588	58,028	120,616	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
126	107,320		Nundial	54,552	52,768	107,320	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
127	25,579		M. T. Kurnool	12,496	13,083	25,579	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
128	7,295		M. T. Cumbum	3,656	3,639	7,295	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
128A	45,208		Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
	959,640		Total	467,640	446,792	914,332	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
129	102,744	Dapah.	Proddatur	52,224	50,520	102,744	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
130	93,051		Budwal	48,067	44,984	93,051	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
131	76,667		Sidhont	39,250	37,417	76,667	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
132	145,180		Pullampet	74,565	70,615	145,180	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
133	145,591		Voilpaud	74,640	70,951	145,591	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
134	128,162		Royacottah	66,306	61,856	128,162	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
135	135,468		Madanapalli	69,103	66,866	135,468	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		

No deaths from cholera.

No deaths from cholera.

No deaths from cholera.

No.	District	Taluk	Village	Population	Area	Revenue	Land Revenue	M. T. Cuddapah	M. T. Bellary	M. T. North Arcot	M. T. Salem	Total	No. of Deaths	Remarks
136	Cuddapah	M. T. Cuddapah	Kadri ...	140,948	...	72,693	68,255	140,948	...	...	...	...	...	...
137			Fulivendla ...	110,406	...	57,384	53,121	110,406	...	...	...	...	...	...
138			Jamalamadugu ...	109,985	...	56,444	53,531	109,985	...	...	...	...	...	...
139			Cuddapah ...	146,798	...	74,496	72,242	146,798	...	...	...	...	...	...
140	Bellary	Total	M. T. Cuddapah	16,275	...	8,339	7,946	16,275	...	...	...	...	...	...
141			Bellary	1,351,194	...	638,400	657,794	1,351,194	...	...	...	...	...	...
142			Adoni...	130,478	...	66,704	63,774	130,478	...	...	...	...	...	...
143			Alur ...	153,860	...	81,690	77,170	153,860	...	...	...	...	...	...
144	Bellary	Total	Ghoody	98,230	...	51,082	47,178	98,230	...	...	...	...	...	...
145			Tadipatri	137,898	...	71,698	66,146	137,898	...	...	...	...	...	...
146			Anantapur	117,211	...	59,945	57,266	117,211	...	...	...	...	...	...
147			Hospett	97,843	...	51,095	46,748	97,843	...	...	...	...	...	...
148	Bellary	Total	Dharmavaram	98,424	...	47,605	46,819	98,424	...	...	...	...	...	...
149			Pennascondah	120,608	...	63,095	57,513	120,608	...	...	...	...	...	...
150			Hindupur	88,754	...	46,182	42,572	88,754	...	...	...	...	...	...
151			Madakurra	87,895	...	46,200	42,695	87,895	...	...	...	...	...	...
152	Bellary	Total	Boyardroog	40,838	...	45,988	41,841	40,838	...	...	...	...	...	...
153			Kudlighi	87,779	...	47,351	46,877	87,779	...	...	...	...	...	...
154			Harpunhully	93,228	...	48,947	41,783	93,228	...	...	...	...	...	...
155			Huvenbudgully	86,729	...	45,586	44,002	86,729	...	...	...	...	...	...
156	North Arcot	Total	M. T. Bellary	51,766	...	27,185	24,551	51,766	...	...	...	...	...	...
157			M. T. Adoni	22,723	...	11,600	11,123	22,723	...	...	...	...	...	...
158			M. T. Ghoody	6,730	...	3,545	3,185	6,730	...	...	...	...	...	...
159			M. T. Anantapur	4,918	...	2,438	2,480	4,918	...	...	...	...	...	...
160	North Arcot	Total	Zemindaries	14,996	...	7,534	7,462	14,996	...	...	...	...	...	...
161			Chendraghiri	1,668,006	...	860,173	807,833	1,668,006	...	...	...	...	...	...
162			Wallajahpett	99,628	...	51,042	48,596	99,628	...	...	...	...	...	...
163			Wandewash	204,101	...	103,172	100,929	204,101	...	...	...	...	...	...
164	North Arcot	Total	Arcoot	157,891	...	77,197	76,810	157,891	...	...	...	...	...	...
165			Vellore	141,134	...	70,850	70,284	141,134	...	...	...	...	...	...
166			Polar	109,150	...	54,820	54,330	109,150	...	...	...	...	...	...
167			Gudlathum	162,980	...	82,466	80,514	162,980	...	...	...	...	...	...
168	North Arcot	Total	Palmanair	60,211	...	30,702	29,509	60,211	...	...	...	...	...	...
169			Chittoor	213,045	...	109,588	108,457	213,045	...	...	...	...	...	...
170			M. T. Vellore	38,022	...	18,189	19,888	38,022	...	...	...	...	...	...
171			M. T. Wallajahpett	12,108	...	6,831	6,272	12,108	...	...	...	...	...	...
172	North Arcot	Total	Zemindaries	664,006	...	338,307	325,699	664,006	...	...	...	...	...	...
173			Chendraghiri	2,015,278	...	1,030,676	994,600	2,015,278	...	...	...	...	...	...
174			Wallajahpett	170,233	...	85,032	85,201	170,233	...	...	...	...	...	...
175			Utagherri	153,901	...	75,966	77,815	153,901	...	...	...	...	...	...
176	Salem	Total	Athoor...	164,096	...	80,266	80,760	164,096	...	...	...	...	...	...
177			Namasul	261,009	...	127,880	133,129	261,009	...	...	...	...	...	...
178			Salem...	343,798	...	170,018	173,775	343,798	...	...	...	...	...	...
179			Kistnagherri	170,233	...	85,032	85,201	170,233	...	...	...	...	...	...

No deaths from cholera.

VI.—(Continued.)
Deaths registered from Cholera in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873.

No.	Population according to Census of 1871.	Districts.	Names of Rural Circles and Towns.	Population for which Returns were received.			July.			August.			September.			October.			November.			December.			Total.		
				Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
179	249,678	Salem—(Contd.)	Trichengode ...	125,220	214,458	249,678	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
180	190,626		Dharampoor ...	95,080	95,546	190,626	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
181	193,037		Oosoor ...	97,276	95,761	193,037	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
182	50,012		M. T. Salem	24,942	25,070	50,012	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1,966,995		Total ...	975,502	991,493	1,966,995	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
183	169,916	Cumbatore.	Suthiamungalum	84,321	85,595	169,916	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
184	90,830		Collegal	48,157	42,673	90,830	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
185	102,813		Bhowany	51,235	51,578	102,813	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
186	223,363		Perindorai	...	...	223,363	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
187	175,659		Caroor...	86,200	89,459	175,659	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
188	217,493		Dharampooram	107,881	109,612	217,493	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
189	123,650		Oodamalpattah	60,462	63,188	123,650	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
190	167,546		Pollachy	82,604	84,942	167,546	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
191	208,685		Coimbatore	102,544	106,141	208,685	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
192	237,808		Pulladam	117,194	120,614	237,808	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
193	35,310		M. T. Coimbatore	17,096	18,214	35,310	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
194	10,201		M. T. Erode	...	...	10,201	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1,763,274		Total ...	874,975	888,299	1,763,274	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
195	36,461	Neilgherries.	Neilgherries ...	20,269	16,192	36,461	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
196	9,982		M. T. Ootacamund...	5,265	4,717	9,982	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
197	3,058		M. T. Coonoor ...	1,658	1,400	3,058	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	49,501		Total ...	27,192	22,309	49,501	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
198	113,713	South Canara.	Kundepoor ...	55,878	57,835	113,713	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
199	231,570		Udipi	114,329	117,241	231,570	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
200	213,067		Mangalore	107,022	106,045	213,067	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
201	107,722		Uppanangadi	55,625	52,097	107,722	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
202	222,578		Kassergode	111,687	110,891	222,578	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
203	29,712		M. T. Mangalore	15,188	14,524	29,712	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	918,362		Total ...	459,729	458,633	918,362	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
204	248,118	Bar.	Cherical	122,190	125,928	248,118	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
205	123,057		Kotayam	60,749	62,308	123,057	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
206	126,938		Wynaad	76,228	49,710	125,938	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
207	243,751		Kurambanad...	121,560	122,191	243,751	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

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VII.

Deaths registered from Small-pox in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873.

No.	Population according to Census of 1871.	Districts.	Names of Rural Circles and Towns.	Population for which Returns were received.			January.			February.			March.			April.			May.			June.		
				Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
1	158,061	Ganjam.	Goomsoor ...	79,300	78,761	158,061	1	5	6	...	...	1	...	...	3	3	3	6	8	3	11	...	2	2
2	222,275		Berhampore ...	109,124	113,151	222,275	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	153,507		Chicacole ...	77,084	76,423	153,507	18	21	39	13	10	23	8	12	20	14	8	22	5	5	10	4	8	12
4	15,587		M. T. Chicacole ...	7,341	8,246	15,587	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5	21,670		M. T. Berhampore ...	10,733	10,937	21,670	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6	817,876		Zemindaries ...	347,431	283,662	631,093	4	9	13	18	16	34	13	7	20	3	21	24	20	18	38	9	15	24
	1,388,976		Total ...	631,013	571,180	1,202,193	23	35	58	31	27	58	24	24	48	25	37	62	37	29	66	18	28	46
7	155,699	Vizagapatnam.	Palcondah ...	73,573	71,480	145,053	10	12	22	15	10	25	16	11	27	26	21	47	14	6	20	15	13	28
8	135,606		Parvatipore ...	64,619	63,104	127,723	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	139,289		Bobbili ...	49,764	47,134	96,898	1	11	12	8	12	20	10	5	15	2	13	23	2	2	2	1	1	2
10	77,364		Salur ...	35,270	34,751	70,021	3	3	6	...	...	...	4	2	6	2	2	4	2	...	...	2	2	5
11	117,276		Vizianagrum ...	42,192	39,432	81,624	...	3	3	3	...	...	...	1	1	1	7	8	1	...	...	2	1	3
12	97,675		Bimlipatam ...	39,040	39,040	78,080	2	4	6	...	...	...	...	2	2	4	6	8	14	1	1	1	3	8
13	48,687	Vizagapatnam.	Vizagapatam ...	23,356	22,469	45,825	5	6	11	7	4	11	4	4	8	3	1	4	2	2	2	1	3	16
14	163,499		Ankapilly ...	64,606	60,057	124,663	24	14	38	24	27	51	10	14	24	13	23	36	12	20	32	5	15	20
15	32,191		M. T. Vizagapatam ...	15,703	16,488	32,191	...	2	2	...	...	...	4	...	4	5	5	10	5	9	14	7	1	8
16	8,744		M. T. Bimlipatam ...	4,318	4,426	8,744	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17	20,169		M. T. Vizianagrum ...	9,986	10,233	20,169	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18	8,512		M. T. Palcondah ...	4,413	4,399	8,812	1	...	1	1	54	132	68	76	144	49	51	100	61	55	116	44	42	86
19	837,750		Zemindaries ...	351,125	335,805	686,930	31	38	69	78	54	132	68	76	144	49	51	100	61	55	116	44	42	86
	1,844,711		Total ...	780,149	748,818	1,528,967	77	97	174	145	115	260	123	121	244	122	134	256	102	100	202	90	107	197
20	109,163	Godavery.	Rajahmundry ...	55,800	53,363	109,163	9	7	16	4	6	10	21	21	42	10	14	24	16	15	31	8	6	13
21	111,489		Peddapore ...	55,398	56,101	111,499	15	12	27	12	9	21	25	15	40	23	18	41	24	26	50	9	6	15
22	203,583		Ramachendrapore ...	102,136	101,447	203,583	20	15	35	21	19	40	17	23	40	35	25	60	19	16	35	7	9	16
23	206,885		Amalapore ...	105,045	101,840	206,885	21	17	38	27	27	54	26	15	41	30	30	60	24	21	45	6	9	15
24	177,876		Narasapore ...	89,768	88,108	177,876	15	16	31	22	11	33	19	22	41	24	26	50	14	9	23	5	1	6
25	111,398		Ellore ...	56,789	54,599	111,388	10	8	18	16	20	36	23	24	47	34	24	58	34	32	66	10	19	29
26	92,457	Godavery.	Undy ...	46,342	46,115	92,457	16	9	25	12	10	22	21	24	44	18	28	46	8	8	16	9	12	21
27	167,491		Tanuku ...	83,757	83,734	167,491	17	20	37	7	15	22	10	16	26	13	20	33	6	12	17	5	6	11
28	145,715		Yernagudem ...	72,866	72,849	145,715	42	38	80	44	50	94	35	40	75	63	36	99	59	35	94	30	27	57
29	17,839		M. T. Cocanada ...	9,095	8,744	17,839	...	2	2	...	...	...	1	...	4	4	2	6	...	...	2	4	3	7
30	19,788		M. T. Rajahmundry ...	10,455	9,253	19,708	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
31	25,487		M. T. Ellore ...	13,788	11,699	25,487	20	23	43	10	13	23	11	23	34	26	16	42	5	8	13	...	7	7
32	203,828		Zemindaries ...	102,374	101,454	203,828	30	19	49	23	11	34	32	23	55	41	38	79	34	25	59	26	18	44
	1,592,939		Total ...	803,603	789,336	1,592,939	215	186	401	198	193	391	241	248	489	322	277	599	242	209	451	119	122	241

33	106,452	54,184	52,268	106,452	12	10	22	10	14	24	19	13	32	4	5	9	14	3	17	4	4	8
34	83,081	42,184	40,947	83,081	1	...	1	6	4	10	8	8	16	9	12	21	6	7	13	3	6	9
35	87,138	43,478	43,665	87,138	4	6	10	4	6	10	17	12	29	10	11	21	21	8	14	1	4	5
36	128,337	65,479	62,868	128,337	6	9	14	6	3	9	16	15	20	21	20	46	27	20	47	17	13	30
37	169,912	86,268	83,944	169,912	6	...	6	6	9	15	20	7	27	27	19	13	6	6	8	5	8	13
38	143,629	73,747	69,892	143,629	19	18	37	8	15	23	7	3	10	6	7	13	6	7	13	4	4	8
39	120,819	61,680	58,939	120,819	12	16	28	15	16	31	6	4	1	8	5	13	7	8	16	2	9	11
40	64,508	32,965	31,543	64,508	4	12	16	6	5	11	...	1	1	...	...	...	1	1	2	1	...	1
41	120,658	60,000	60,658	120,658	13	9	22	16	12	28	13	6	19	11	8	19	4	1	5	4	2	6
42	101,728	52,384	49,344	101,728	11	13	24	12	4	16	1	1	2	...	5	5	1	6	7	...	3	3
43	108,964	56,074	53,890	108,964	17	10	27	13	3	16	11	8	19	4	8	12	7	4	11	...	3	8
44	18,033	9,074	8,969	18,033	...	1	1	5	5	10	...	2	2	7	4	11	6	2	8	7	8	15
45	36,188	17,268	18,920	36,188	...	1	1	2	...	2	3	1	4	7	5	12	6	4	10	...	1	1
46	168,127	83,107	80,020	168,127	12	5	17	12	11	23	10	6	16	19	18	37	14	11	25	15	6	21
	1,452,874	714,879	714,879	1,452,874	117	99	216	121	107	228	180	87	217	133	137	280	108	87	195	63	71	134
47	195,068	96,680	96,388	195,068	7	8	15	12	11	23	15	8	23	11	8	19	6	1	7	6	5	11
48	138,375	70,591	67,784	138,375	4	4	8	4	...	4	3	4	7	2	5	7	2	1	3	...	...	...
49	83,336	42,011	39,326	83,336	3	2	5	5	6	9	1	3	4	3	1	4	...	...	...	...	...	...
50	149,847	76,329	74,518	149,847	4	6	10	5	2	5	7	1	6	11	17	28	5	2	6	...	2	7
51	147,141	76,637	70,504	147,141	4	2	6	3	2	5	6	3	9	11	17	28	5	1	6	...	...	...
52	63,885	38,131	30,754	63,885	1	1	2	...	1	1	...	...	...	2	3	4	1	...	1	...	1	1
53	108,802	53,541	50,261	108,802	7	6	13	3	6	9	5	1	6	3	1	4	1	...	1	...	1	1
54	100,985	52,619	48,466	100,985	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
55	127,258	65,953	61,305	127,258	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
56	29,922	14,879	15,043	29,922	...	...	...	...	10	25	...	...	...	...	...	...	...	...	...	...	...	...
57	289,192	124,121	115,071	289,192	6	10	16	15	10	25	11	7	18	13	13	25	10	13	23	11	5	16
	1,376,811	707,392	689,419	1,376,811	39	39	78	45	38	83	42	35	77	47	51	98	27	20	47	22	14	36
58	327,552	194,676	202,876	327,552	21	24	45	46	59	105	101	82	183	105	105	210	69	71	140	34	39	73
59	104,210	53,204	51,006	104,210	4	4	8	4	11	15	11	11	22	6	3	9	6	8	14	16	7	23
60	149,898	76,983	72,916	149,898	18	21	39	13	22	34	14	22	36	22	29	61	10	10	20	5	4	9
61	186,404	93,857	92,547	186,404	14	17	31	19	17	36	13	17	30	23	23	46	13	13	26	15	7	23
62	132,328	67,653	64,675	132,328	13	7	20	12	16	28	12	10	22	5	4	9	11	7	18	5	6	11
63	197,308	100,458	96,855	197,308	5	4	9	7	16	22	8	14	22	14	19	33	9	8	17	10	8	13
64	130,709	65,566	65,143	130,709	9	7	16	15	8	23	23	26	49	26	16	42	15	13	28	11	10	21
65	37,327	18,252	19,075	37,327	1	2	3	...	...	...	3	3	6	4	10	14	11	7	18	4	11	15
	938,184	475,968	462,216	938,184	64	62	126	69	89	158	84	103	187	100	104	204	75	66	141	66	53	119
66	239,754	122,412	117,342	239,754	9	4	13	13	16	29	7	7	14	9	6	15	15	14	29	7	7	14
67	164,657	83,571	81,066	164,657	4	2	6	20	11	31	15	13	23	15	16	30	1	7	8	2	2	4
68	236,108	120,178	115,980	236,108	11	10	21	8	9	12	12	11	23	14	11	26	17	14	31	8	10	18
69	244,559	123,269	121,290	244,559	3	5	8	15	14	29	15	9	24	11	9	20	6	10	16	3	4	7
70	239,133	118,520	120,613	239,133	5	10	15	10	15	25	14	13	27	23	14	37	12	8	20	7	10	17
71	178,504	89,495	89,009	178,504	14	23	37	18	24	42	29	53	82	26	20	46	17	11	28	16	7	23

VII.—(Continued.)
Deaths registered from Small-pox in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873.

No.	Population according to Census of 1871.	Districts.	Names of Rural Circles and Towns.	Population for which Returns were received.			January.			February.			March.			April.			May.			June.		
				Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
72	196,566	Tamil Nadu (Contd.)	Kullacoorchi ..	99,373	97,193	196,566	23	27	50	14	8	22	6	6	12	21	43	7	6	13	5	8	13	
73	216,246		Yellavanasoor ..	109,599	106,647	216,246	11	21	32	16	10	26	33	15	37	70	31	57	15	9	24	13	12	
74	40,290		M. T. Cuddalore ..	19,505	20,785	40,290	...	1	1	...	...	1	1	2	2	4	2	4	1	2	3	...	...	...
	1,755,817		Total ..	885,922	869,895	1,755,817	80	103	183	109	108	217	133	91	151	284	130	278	91	81	172	61	60	121
75	237,893	Tamil Nadu	Woodiarpolliam ..	119,998	117,895	237,893	9	11	20	9	6	15	1	3	4	18	42	9	7	16	10	5	15	
76	218,660		Trichinopoly ..	...	...	218,660	15	12	27	16	15	31	19	12	25	44	12	23	12	14	26	10	10	
77	228,313		Kullitalai ..	113,233	115,080	228,313	5	6	11	11	15	26	5	6	11	10	16	11	10	8	18	5	6	
78	257,174		Mooseri ..	123,875	133,299	257,174	16	16	32	11	4	15	18	13	13	31	23	10	13	14	27	9	8	
79	170,567	Tamil Nadu	Perambaloor ..	83,837	86,730	170,567	31	16	47	33	26	59	16	11	27	19	43	6	3	22	10	15	25	
80	76,530		M. T. Trichinopoly ..	36,983	39,597	76,530	7	6	13	5	5	10	5	11	16	8	3	11	6	3	9	8	7	
81	11,271		M. T. Sreerungum ..	...	...	11,271	2	1	3	3	...	3	...	1	1	1	...	...	1	3	4	2	2	
81a	...		Zemindaries ..	...	...	...	3	1	4	5	3	8	3	4	7	7	9	10	12	6	18	2	...	
	1,200,408	Tamil Nadu	Total ..	588,194	612,274	1,200,408	88	69	157	93	74	167	67	74	141	87	168	72	68	140	56	53	109	
82	107,459		Sheally ..	52,720	54,739	107,459	5	1	6	12	8	20	23	22	45	19	18	37	6	4	10	8	6	
83	198,193		Mayavaram ..	96,110	102,083	198,193	12	8	20	13	15	28	20	15	35	16	23	39	12	14	26	13	6	
84	207,407		Nannilum ..	98,551	108,856	207,407	22	8	30	14	15	29	25	17	42	16	9	26	12	16	28	21	19	
85	152,208	Tamil Nadu	Negapatam ..	72,379	79,829	152,208	5	5	10	2	9	11	10	20	30	16	22	14	18	32	21	15	36	
86	154,714		Trichinopoly ..	76,177	78,537	154,714	4	1	5	4	9	13	7	1	8	8	3	11	6	6	12	3	3	
87	237,423		Puttucottah ..	116,777	121,646	237,423	21	17	38	17	36	53	15	9	24	11	12	23	5	7	12	4	8	
88	292,164		Tanjore ..	141,444	150,720	292,164	37	26	63	33	19	52	41	60	91	45	50	99	36	38	74	27	28	
89	296,590	Tamil Nadu	Combaconum ..	144,020	152,570	296,590	22	22	44	20	12	32	32	29	61	31	40	71	34	19	53	28	25	
90	90,314		Mannargoody ..	43,561	46,753	90,314	14	17	31	22	16	38	15	20	35	24	17	41	16	12	28	11	15	
91	52,175		M. T. Tanjore ..	25,726	26,449	52,175	4	4	8	3	2	6	3	7	10	1	4	5	1	1	2	6	6	
92	44,414		M. T. Combaconum ..	21,569	22,875	44,414	...	...	...	2	...	2	2	1	3	4	7	5	12	1	4	5	7	
93	21,165	Tamil Nadu	M. T. Mayavaram ..	10,407	10,758	21,165	...	1	3	...	...	1	1	1	1	1	...	1	1	2	3	2		
94	48,525		M. T. Negapatam ..	21,250	27,275	48,525	2	3	5	3	...	3	8	...	4	12	6	...	6	4	10	2		
95	17,703		M. T. Mannargoody ..	8,524	9,179	17,703	4	3	7	...	2	2	3	3	...	3	2	2	2	2	4	3	3	
	1,973,731		Total ..	953,968	1,019,763	1,973,731	153	113	266	145	144	289	204	197	401	199	210	409	152	147	299	157	143	
96	311,501	Tamil Nadu	Dindigul ..	153,199	158,302	311,501	37	33	70	26	45	71	18	25	43	12	12	24	21	32	63	16	23	
97	128,983		Meylur ..	63,392	65,591	128,983	4	5	9	2	2	4	10	7	17	1	...	...	8	11	19	...	...	
98	179,431		Madurai ..	88,826	91,106	179,431	7	9	16	10	10	20	7	6	13	3	7	10	10	10	20	6	8	
99	241,215		Tirunelveli ..	120,724	120,491	241,215	35	32	67	11	6	17	14	10	24	6	8	14	15	14	10	29	12	
100	217,418	Tamil Nadu	Peracoolam ..	107,078	110,346	217,418	11	4	15	10	23	33	4	12	16	3	4	7	15	5	20	1	14	
101	184,831		Pulni ..	91,077	93,754	184,831	7	5	12	12	15	27	8	7	15	5	8	13	2	9	11	3	3	
102	...		Sittanadil Villages ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
103	51,987		M. T. Madurai ..	26,224	25,763	51,987	...	1	1	...	...	1	...	1	...	...	1	...	...	1	1	2	...	...

104	12,865	M. T. Dindigul	6,540	6,325	12,865	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...</
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VII.—(Continued.)
Deaths registered from Small pox in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873.

No.	Population according to Census of 1871.	Names of Rural Circles and Towns.	Population for which Returns were received.			January.			February.			March.			April.			May.			June.		
			Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
141	130,478	Bellary	66,704	63,774	130,478	4	6	10	17	11	28	1	7	8	3	6	9	4	6	10	3	1	4
142	158,860	Adoni	81,690	77,170	158,860	9	5	14	8	12	20	42	23	65	10	12	22	20	24	44	16	29	45
143	98,230	Alur	51,052	47,178	98,230	11	6	17	11	12	23	5	9	14	12	12	24	3	1	4	4	3	7
144	137,838	Ghootty	71,693	66,145	137,838	4	7	11	8	12	20	6	4	10	13	18	26	8	6	14	8	5	13
145	117,211	Tudpatri	59,945	57,266	117,211	4	4	8	5	4	9	2	7	9	6	1	7	3	2	5	1	2	3
146	97,843	Anantapoor	51,095	46,748	97,843	8	9	17	7	5	12	6	5	11	5	6	10	5	6	11	9	6	15
147	93,424	Hospett	47,605	45,819	93,424	2	3	5	2	1	3	3	1	4	5	4	9	4	5	9	1	1	1
148	120,608	Dharmavaram	63,095	57,513	120,608	5	3	8	2	6	12	3	3	6	1	1	2	1	1	2	1	1	1
149	88,754	Pennacundah	46,182	42,572	88,754	2	2	4	6	6	12	3	4	7	1	4	5	4	1	1	5	8	14
150	87,895	Hindapur	45,200	42,635	87,895	5	6	11	2	4	6	5	3	8	7	7	14	8	9	17	6	1	1
151	79,458	Madakasara	40,838	38,629	79,458	5	4	9	1	3	4	1	3	4	2	3	3	2	1	2	1	1	2
152	87,779	Royadroog	45,938	41,841	87,779	4	4	8	4	1	5	2	3	5	2	3	10	1	6	7	3	3	6
153	93,228	Kudghy	47,351	45,877	93,228	2	2	4	4	3	7	6	4	10	2	2	4	3	3	6	5	3	8
154	85,729	Hurpanhulli	43,947	41,782	85,729	3	1	4	12	18	30	14	15	29	8	4	12	6	14	20	4	7	11
155	89,538	Huvimbudgalli	45,536	44,002	89,538	13	18	31	12	18	30	1	1	2	...	1	1	...	1	1	...	1	1
156	51,766	M. T. Bellary	27,185	24,581	51,766	...	...	...	1	3	3	5	2	7	8	2	10	1	2	3	1	...	...
157	22,723	M. T. Adoni	11,600	11,123	22,723	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
158	6,730	M. T. Ghootty	3,545	3,185	6,730	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
159	4,918	M. T. Anantapoor	2,438	2,480	4,918	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
160	14,996	M. T. Anantapoor	7,534	7,462	14,996	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1,668,006	Total	860,173	807,833	1,668,006	81	71	152	87	100	187	101	91	192	93	77	170	70	88	158	61	72	133
161	99,628	Chendragherry	51,042	48,586	99,628	6	10	16	4	29	4	3	5	8	6	4	10	6	5	11	3	5	8
162	204,101	Wallajahpett	103,172	100,929	204,101	28	28	56	32	18	61	27	17	44	30	20	50	15	17	32	22	31	53
163	153,507	Wandewash	77,197	76,310	153,507	19	23	42	24	12	42	26	27	53	36	36	72	21	27	48	16	16	32
164	157,391	Arcoot	78,564	78,827	157,391	27	15	42	17	12	29	23	21	44	21	14	35	25	28	53	25	29	54
165	141,134	Vellore	70,850	70,284	141,134	23	24	47	38	37	75	28	32	60	39	31	70	11	10	21	13	14	27
166	109,180	Polar	54,820	54,330	109,180	6	6	12	12	17	29	7	3	10	18	19	37	3	1	4	14	17	31
167	162,980	Gudlathum	82,466	80,514	162,980	16	18	34	28	16	44	29	25	54	27	38	65	29	33	62	11	10	21
168	60,211	Palmanair	30,702	29,509	60,211	...	...	...	4	5	9	4	6	10	4	7	11	2	4	15	6	1	7
169	213,045	Chittoor	109,588	103,457	213,045	14	15	29	14	9	23	13	37	50	17	13	30	7	8	15	12	9	21
170	38,022	M. T. Vellore	18,139	19,883	38,022	6	5	11	...	...	...	3	...	...	4	2	6	3	4	7	4	1	5
171	12,103	M. T. Wallajahpett	5,831	6,272	12,103	1	3	4	5	3	8	2	3	5	3	2	5	1	1	2	4	1	5
172	664,006	Zemindaries	338,307	325,699	664,006	62	50	112	46	49	95	49	65	114	64	85	149	52	75	127	55	63	118
	2,015,278	Total	1,020,678	994,600	2,015,278	208	198	406	224	196	420	214	241	455	269	271	540	175	213	388	185	197	382
173	170,233	Kistnagherry	85,032	85,201	170,233	31	36	67	10	13	23	11	10	21	20	12	32	18	19	37	16	9	25
174	190,800	Tripatore	93,812	96,988	190,800	7	8	15	11	11	22	24	20	44	22	18	40	9	21	30	6	15	21
175	158,801	Utangherry	75,986	77,815	153,801	5	6	11	26	8	34	21	17	38	11	13	24	12	10	22	14	16	30
176	164,006	Athoor	80,256	83,750	164,006	48	76	124	84	78	162	93	91	184	69	59	128	30	43	73	15	22	37

177	261,009	133,129	261,009	80	72	162	72	71	143	61	61	122	62	65	127	40	44	84	28	40	68
178	343,793	173,776	343,793	109	89	198	109	108	217	120	98	218	102	101	203	66	86	152	93	69	162
179	249,678	124,458	249,678	132	123	244	118	112	290	119	115	234	89	73	162	67	69	136	38	46	84
180	190,626	95,646	190,626	10	15	25	25	10	35	7	4	11	17	8	25	11	15	26	24	28	52
181	198,087	96,761	198,087	19	10	29	25	23	43	22	17	39	24	26	50	20	22	42	12	10	22
182	50,012	25,070	50,012	39	40	79	81	33	63	57	39	96	21	19	40	18	12	30	12	9	21
	1,966,996	991,498	1,966,996	490	474	954	511	466	977	535	472	1,007	497	894	881	291	341	632	258	264	522
183	169,916	84,321	169,916	4	8	12	51	48	99	35	32	67	29	29	53	23	22	45	17	18	35
184	90,830	46,167	90,830	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
185	102,313	51,578	102,313	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
186	223,363	...	223,363	38	26	59	34	86	70	53	38	96	85	69	154	50	49	99	81	17	48
187	175,659	...	175,659	15	8	23	17	13	30	8	5	8	4	5	9	4	5	9	8	4	7
188	217,493	107,881	217,493	16	17	33	15	24	39	22	19	41	12	11	23	12	18	25	9	10	19
189	123,650	60,462	123,650	6	8	14	5	3	18	8	16	27	43	26	53	9	4	13	3	3	6
190	167,546	82,604	167,546	12	17	29	39	29	68	16	13	29	34	35	69	23	86	64	28	19	47
191	208,686	106,141	208,686	14	30	44	66	50	116	33	37	75	39	40	79	6	14	20	18	36	54
192	237,808	117,194	237,808	19	12	31	22	20	42	33	47	80	38	31	69	14	32	46	13	15	28
193	35,310	17,096	35,310	3	1	4	80	30	60	11	12	23	4	3	7	2	1	3	...	1	2
194	10,201	...	10,201	9	2	11	12	11	23	3	10	13	4	2	6	1	...	1	1	1	2
	1,763,274	874,975	1,763,274	143	134	277	309	281	590	249	249	498	290	272	562	182	192	374	140	187	277
195	36,461	16,192	36,461	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
196	9,982	4,717	9,982	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
197	3,058	1,400	3,058	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	49,501	22,809	49,501	...	1	1	4	1	5	2	2	4	1	4	5	...	...	...	2	1	3
198	113,718	55,878	113,718	4	2	6	7	4	11	7	8	15	3	2	5	2	6	8	...	...	...
199	231,570	114,329	231,570	17	21	38	18	25	43	10	20	30	5	11	16	3	3	6	5	1	6
200	213,087	107,022	213,087	8	8	16	13	3	16	18	19	37	16	10	26	6	2	8	3	9	12
201	107,722	55,625	107,722	...	...	...	...	...	...	...	...	1	3	...	3	...	2	2	5	2	7
202	222,578	111,687	222,578	4	...	...	...	...	...	...	...	29	7	10	17	4	...	4	4	1	5
203	29,712	15,188	29,712	...	1	1	1	...	...	1	...	1	...	...	...	...	...	...	...	...	...
	918,362	459,729	918,362	33	37	70	48	39	87	49	64	113	34	33	67	15	13	28	17	13	30

VII.—(Continued.)

Deaths registered from Small-pox in the Rural Circles and Towns of the Madras Presidency during each month of the year 1873.

No.	Population according to Census of 1871.	Districts.	Names of Rural Circles and Towns.			Population for which Returns were received.			January.			February.			March.			April.			May.			June.			
						Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.				
204	248,118	Malabar.	Cherical	...	122,190	125,928	248,118	8	6	13	12	5	17	1	6	6	2	3	5	1	1	2	2	...	2	2	4
205	123,057		Kotvam	...	60,749	62,308	123,057	...	...	...	9	2	11	14	7	21	8	1	4	3	...	2	...	1	1	1	3
206	125,938		Wynaad	...	76,228	49,710	125,938	2	1	3	...	2	5	4	5	...	3	...	4	...	...	3	...	...	2	1	3
207	243,751		Kurambraud	...	121,560	122,191	243,751	11	4	15	16	6	21	15	10	25	26	21	47	23	23	23	46	7	10	17	17
208	141,806		Calicut	...	70,126	71,680	141,806	50	26	76	69	29	98	49	19	68	26	16	42	19	7	26	16	6	3	8	8
209	287,936		Ernad	...	145,465	142,471	287,936	34	23	57	100	41	141	51	52	103	56	37	93	15	14	29	15	6	21	21	21
210	292,482		Valuvanad	...	144,796	147,686	292,482	5	4	9	29	10	39	33	21	54	29	25	54	9	16	25	16	12	28	28	28
211	5,986		Cochin	...	3,142	2,844	5,986	...	...	...	...	...	...	...	...	...	1	1	1	...	...	...	...	...	...	...	...
212	295,103		Palghaut	...	144,151	150,952	295,103	26	16	42	47	40	87	88	47	135	61	39	100	38	25	63	24	15	39	39	
213	374,756		Ponnani	...	185,306	189,450	374,756	66	50	116	181	154	335	156	105	261	159	102	261	107	71	178	113	85	198	198	
214	...		Anjengo	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	2	...	...	...	...	...	...	...
215	...		Tangacherry	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
216	20,504		M. T. Tellicherry	...	9,847	10,657	20,504	1	...	1	...	1	3	2	5	...	...	2	2	6	...	7	13	4	4	8	8
217	47,962		M. T. Calicut	...	24,061	23,898	47,962	50	38	88	41	28	69	28	22	50	27	22	49	8	11	19	4	4	8	8	
218	30,752	M. T. Palghaut	...	15,074	15,678	30,752	4	1	5	2	1	3	6	6	3	3	6	6	1	6	7	6	4	4	9	9	
219	13,840	M. T. Cochin	...	6,985	6,855	13,840	48	31	79	68	63	131	46	37	83	26	28	54	23	16	39	18	15	33	33		
220	9,259	M. T. Cannanore	...	5,206	4,053	9,259	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	
2,261,250			Total ...	1,134,889	1,126,361	2,261,250	305	199	504	577	381	958	495	327	822	424	300	724	253	197	450	219	155	374	374		
30,835,577			Total Madras Presidency	15,221,079	15,066,763	30,287,842	2,549	2,314	4,863	3,142	2,812	5,954	3,096	2,885	5,981	3,159	2,905	6,064	2,256	2,184	4,440	1,792	1,732	3,524	3,524		

VII.—(Continued.)

Deaths registered from Small-pox in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873.

No.	Population according to Census of 1871.	Districts.	Names of Rural Circles and Towns.	Population for which Returns were received.			July.			August.			September.			October.			November.			December.			Total.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
				Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
1	163,061	Ganjam.	Goonsoor	79,300	78,761	168,061	1	...	1	5	6	2	1	3	2	4	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...</

66	239,754	122,412	117,342	089,754	13	8	21	8	6	14	10	22	32	14	15	29	27	35	62	45	40	85	177	180	357
67	164,657	83,571	81,086	164,657	9	2	11	1	2	3	17	10	27	18	11	29	21	11	32	21	15	36	143	102	245
68	236,108	120,178	115,930	236,108	10	11	21	13	6	19	3	7	10	13	12	25	7	10	17	15	11	28	127	122	249
69	244,559	123,268	121,290	244,559	8	2	10	2	22	11	2	8	10	4	6	10	20	13	38	7	6	13	96	95	191
70	239,133	118,520	120,613	239,133	16	12	28	25	23	47	6	2	8	14	9	23	16	7	26	18	23	21	167	184	291
71	178,504	89,495	89,009	178,504	14	3	17	11	13	24	3	13	16	9	7	16	15	11	26	18	28	46	190	213	408
72	196,566	99,378	97,193	196,566	5	9	14	...	2	2	7	4	11	8	7	15	7	6	38	8	12	30	112	116	228
73	216,246	109,599	106,647	216,246	18	21	39	15	12	27	9	15	24	27	31	58	21	23	44	33	31	64	237	253	490
74	40,290	19,505	20,785	40,290	...	...	...	...	...	...	1	2	3	...	2	2	...	...	...	2	...	2	8	13	20
	1,755,817	885,922	869,895	1,755,817	98	68	161	75	72	147	58	83	141	107	100	207	134	116	250	158	155	313	1,247	1,227	2,474
	Total ...																								
75	237,893	119,998	117,895	237,893	7	10	17	9	5	14	5	5	10	11	17	28	13	22	35	6	16	22	113	125	238
76	218,660	...	...	218,660	6	10	16	15	7	22	7	7	14	8	12	25	14	14	28	6	8	14	145	155	300
77	239,313	113,233	115,080	239,313	4	8	13	4	3	7	7	7	14	8	10	18	6	7	36	8	6	14	79	92	171
78	257,174	123,875	133,299	257,174	10	5	11	5	16	12	10	12	23	17	12	29	17	19	36	25	36	61	172	152	324
79	170,567	83,587	86,730	170,567	10	16	26	8	7	15	11	12	23	6	18	24	9	4	13	12	10	22	173	167	346
80	76,530	36,933	39,597	76,530	3	3	6	5	5	10	6	1	7	2	1	3	3	3	6	2	3	5	60	51	111
81	11,271	...	...	11,271	1	1	2	5	3	8	...	1	1	1	1	1	...	...	...	...	...	...	15	13	27
81a	...	...	...	...	5	4	9	6	9	15	1	4	5	7	1	8	10	8	18	8	2	10	63	51	114
	1,200,408	588,134	612,274	1,200,408	46	57	103	63	44	107	50	56	106	65	71	136	72	77	149	67	81	148	836	805	1,631
	Total ...																								
82	107,459	52,720	54,739	107,459	5	3	8	7	10	17	5	6	11	3	...	3	3	2	5	7	5	12	103	85	188
83	198,198	96,110	102,083	198,198	9	20	29	22	23	45	20	22	42	14	23	37	23	20	43	26	13	39	200	202	402
84	207,407	98,551	104,856	207,407	22	17	39	21	11	32	9	12	23	14	14	23	11	6	17	14	11	35	201	155	356
85	152,208	72,379	79,539	152,208	9	2	17	12	12	24	9	14	23	15	7	22	11	7	21	7	6	13	131	146	277
86	154,714	76,177	81,537	154,714	2	2	4	...	4	3	5	6	8	11	7	18	11	7	18	7	7	14	66	55	121
87	237,423	115,777	121,646	237,423	7	4	11	8	4	12	10	8	18	6	5	11	11	12	23	10	12	23	135	184	259
88	292,164	141,444	150,720	292,164	44	38	82	52	47	99	35	43	78	38	32	70	32	40	72	25	13	38	445	424	869
89	296,590	144,020	152,570	296,590	49	16	65	41	36	77	35	36	71	35	41	76	40	34	74	34	18	52	401	328	729
90	143,561	69,314	74,247	143,561	19	18	32	8	8	16	8	8	16	3	1	4	2	2	4	2	...	2	144	129	273
91	52,176	25,726	26,449	52,176	5	4	9	3	3	6	3	3	6	3	1	4	1	3	4	1	3	4	84	41	75
92	44,444	21,569	22,575	44,444	14	9	23	6	7	13	6	5	11	8	2	10	6	2	7	2	4	6	59	45	104
93	21,165	10,407	10,768	21,165	4	3	7	3	2	5	5	4	9	2	...	3	...	1	1	1	1	2	22	16	38
94	43,525	21,250	27,275	43,525	2	...	2	3	4	7	2	1	3	...	...	3	3	4	1	5	2	...	38	26	64
95	17,703	8,524	9,179	17,703	1	4	5	1	2	3	...	1	1	...	1	1	1	...	1	...	...	15	20	35	
	1,978,731	958,968	1,019,763	1,978,731	192	141	338	187	173	360	150	168	318	152	137	289	155	140	295	138	93	231	1,984	1,806	3,790
	Total ...																								
96	311,501	153,199	159,302	311,501	19	25	44	22	12	34	13	6	19	7	10	17	9	15	24	10	10	20	210	248	458
97	128,983	63,332	65,651	128,983	...	...	...	...	...	...	...	...	1	2	2	4	1	3	4	2	...	2	30	31	61
98	179,431	88,326	91,105	179,431	5	4	9	9	4	13	2	2	4	5	6	11	4	8	12	8	9	17	76	83	159
99	241,215	120,724	120,491	241,215	11	17	28	19	11	30	1	3	5	5	8	8	8	17	25	14	21	35	151	156	307
100	217,418	107,073	110,345	217,418	5	3	8	4	2	6	3	2	5	5	2	7	8	5	13	4	3	7	73	65	138
101	184,331	91,077	98,754	184,331	2	5	7	3	...	3	1	...	1	8	5	13	2	1	3	2	...	2	55	58	113
102	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
103	51,987	26,324	26,753	51,987	...	...	...	2	...	2	1	1	2	2	...	2	2	2	4	1	...	1	12	8	20
104	12,865	6,540	6,925	12,865	...	...	...	...	1	1	...	...	...	1	...	1	...	...	...	...	...	...	2	1	3
105	504,131	246,574	257,567	504,131	14	17	31	13	11	24	15	16	31	17	19	36	...	...	...	...	...	...	185	180	365
106	434,253	208,997	225,256	434,253	3	4	7	8	4	12	16	13	29	17	27	44	...	...	...	...	...	...	73	78	146
	2,266,615	1,112,066	1,154,549	2,266,615	59	75	134	80	45	125	52	44	96	69	74	143	34	51	85	41	43	84	867	908	1,770
	Total ...																								

VII.—(Continued.)

Deaths registered from Small-pox in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873.

No.	Population according to Census of 1871.	Districts.	Names of Rural Circles and Towns.	Population for which Returns were received.			July.			August.			September.			October.			November.			December.			Total.			
				Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	
107	176,954	Tinnevely.	Strivilliputtur	88,263	88,691	176,952	6	7	13	3	3	6	...	4	4	8	14	8	3	11	4	5	9	60	61	121		
108	156,862		Satur	78,467	78,395	156,862	4	7	11	2	4	5	9	2	7	9	3	4	7	8	7	6	12	99	110	209		
109	285,811		Ottapidaram	142,862	142,949	285,811	18	17	35	22	40	62	21	25	46	22	26	48	30	43	73	36	30	66	410	423	833	
110	234,346		Tenkarai	112,704	121,642	234,346	22	17	39	29	22	51	7	12	19	14	9	23	19	8	27	14	11	25	226	499	725	
111	178,078		Nangunery	87,025	91,053	178,078	6	3	9	8	13	21	7	4	11	4	4	8	5	8	13	11	6	17	111	93	204	
112	163,215		Ambasamudram	77,640	85,575	163,215	7	7	14	5	2	7	1	3	4	1	1	...	2	3	5	7	2	9	68	64	132	
113	122,001		Tenkasi	61,010	69,991	122,001	4	4	8	5	2	7	7	4	11	6	4	10	3	2	5	9	11	20	97	73	170	
114	182,018		Sankaranainar Covil.	90,214	91,804	182,018	7	8	15	12	7	19	4	3	7	8	10	18	13	8	21	12	3	15	131	127	258	
115	145,120		Tinnevely	73,651	71,469	145,120	16	16	32	12	13	25	7	12	19	9	12	21	10	6	16	6	6	12	148	136	284	
116	21,044		M. T. Tinnevely	10,549	10,495	21,044	1	2	3	4	1	5	1	1	1	1	2	2	1	...	1	...	1	10	9	19	9	
117	17,945		M. T. Palamcottah	8,847	9,098	17,945	1	...	1	1	1	2	...	...	...	...	...	1	1	1	...	...	...	8	6	14	8	
118	10,565		M. T. Tuticorin	5,283	5,282	10,565	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	6	8	...	
	1,693,959		Total	836,515	857,444	1,693,959	92	90	182	105	109	214	57	75	132	73	80	153	100	88	188	105	81	186	1,417	1,334	2,751	
119	101,866	Kurnool.	Nundikotkur	52,269	49,597	101,866	...	2	2	...	4	6	1	1	2	3	6	9	1	2	3	...	...	...	9	16	25	
120	92,665		Marakapur	47,213	45,432	92,665	...	...	...	1	...	3	...	4	4	4	6	10	1	...	2	3	...	...	15	12	27	
121	115,717		Cumbum	58,765	56,982	115,747	3	3	6	2	3	5	...	3	4	6	4	6	1	2	3	1	1	2	29	30	59	
122	71,066		Servilli	36,249	34,817	71,066	2	...	2	1	...	1	...	2	2	6	1	...	...	...	...	...	...	19	14	33		
123	98,814		Koilkuntla	49,984	48,800	98,814	1	2	3	...	...	...	2	2	4	1	6	7	...	...	...	...	...	35	41	76		
124	173,434		Puttikondah	89,868	83,566	173,434	10	12	22	7	5	12	5	3	8	...	4	4	1	1	1	2	8	6	14	118	105	223
125	120,616		Ramulcottah	62,588	58,028	120,616	3	4	7	8	12	20	9	9	18	3	8	11	6	4	10	9	8	17	116	100	216	
126	107,320		Nundial	54,552	52,768	107,320	5	4	9	1	2	3	2	1	3	2	1	3	8	5	13	2	2	4	44	42	86	
127	25,579		M. T. Kurnool	12,496	13,083	25,579	...	...	...	...	2	2	...	...	...	...	1	...	1	2	1	3	1	1	2	5	5	10
128	7,295		M. T. Cumbum	3,656	3,639	7,295	1	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	2	1	3	...	
128A	45,208		Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	959,640		Total	467,640	446,792	914,332	25	27	52	22	26	48	23	25	48	15	31	46	20	15	35	21	18	39	392	366	758	
129	102,744	Cuddapah.	Puddalore	52,224	50,520	102,744	...	3	3	...	7	13	3	1	4	4	2	6	...	2	2	...	1	1	1	25	25	50
130	93,051		Badvail	48,067	44,984	93,051	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...	1	1	10	10	21
131	76,667		Sidhout	39,280	37,417	76,667	1	...	1	...	1	1	1	1	2	1	3	4	1	3	4	2	1	3	9	9	18	
132	145,180		Pullampett	74,565	70,615	145,180	...	2	2	...	2	2	2	2	4	2	2	4	6	7	13	7	4	11	31	31	62	
133	145,591		Vollpand	74,640	70,951	145,591	9	3	12	10	16	26	...	2	2	3	5	5	8	10	...	...	...	...	50	57	107	
134	128,162		Royacottah	66,306	61,856	128,162	3	5	8	...	...	...	2	2	4	7	9	16	8	3	11	2	...	...	31	30	61	
135	135,468		Mudnapally	69,102	66,366	135,468	8	4	12	3	8	11	1	4	8	3	...	3	9	3	12	13	2	15	108	96	204	
136	140,948		Kadri...	72,693	68,255	140,948	8	8	16	14	9	23	16	15	31	19	10	29	14	15	29	21	18	39	133	111	244	
137	110,405		Pulivendla	57,254	53,121	110,405	9	12	21	12	7	19	13	10	23	18	24	42	8	20	28	20	18	38	127	124	251	
138	109,965		Jamalanadugu	56,444	53,521	109,965	4	6	10	4	2	6	1	...	1	3	3	6	4	3	7	8	6	14	46	42	88	

R89 140	146,739 16,275	74,496 8,329	72,242 7,946	146,738 16,275	5 ...	6 ...	11 ...	4 ...	1 ...	5 ...	1 ...	4 ...	5 ...	2 ...	3 ...	5 ...	121 ...	56 ...	70 ...	126 ...	77 ...	56 ...	183 ...	600 ...	27 2	38 3	60 5
Cuddapah ...																											
M. T. Cuddapah ...																											
Total ...																											
141	180,478	68,704	63,774	130,478	4	5	9	1	2	3	3	4	7	1	1	2	2	1	2	3	2	3	5	44	54	98	60
142	158,860	81,690	77,170	158,860	23	24	47	7	17	24	5	8	8	3	3	4	4	3	5	8	9	10	19	155	165	320	
143	98,280	51,052	47,178	98,280	9	8	17	7	12	20	...	1	10	2	1	3	...	...	...	...	...	...	...	65	65	130	
144	137,838	71,698	66,145	137,838	4	3	7	4	3	7	6	4	10	4	3	7	7	4	10	14	7	21	7	83	77	160	
145	117,211	59,945	57,266	117,211	2	4	6	...	3	3	8	...	4	4	3	1	4	2	6	4	6	4	10	38	28	66	
146	97,848	51,095	46,748	97,848	6	2	8	3	4	7	3	4	7	5	9	14	5	9	14	14	1	3	4	68	62	130	
147	93,424	47,605	45,819	93,424	2	...	2	1	3	4	3	1	4	4	2	6	...	...	...	...	...	...	4	23	21	44	
148	120,608	68,095	57,518	120,608	3	2	5	2	...	1	2	1	5	3	3	2	5	4	3	7	10	9	19	38	27	65	
149	88,754	46,182	42,572	88,754	...	1	1	1	1	2	1	2	1	5	2	2	2	1	1	2	1	4	4	17	23	40	
150	87,896	45,200	42,695	87,896	3	5	8	4	2	6	2	...	1	1	...	2	2	2	1	1	3	1	4	48	46	94	
151	79,458	40,838	38,620	79,458	...	1	1	2	...	...	2	...	...	3	...	3	...	...	...	...	...	...	2	18	6	24	
152	87,779	46,938	41,841	87,779	2	7	9	...	1	1	1	3	...	2	3	5	3	...	...	...	...	...	31	33	64		
153	93,228	47,851	45,877	93,228	3	1	4	7	5	13	2	2	2	4	2	3	5	6	2	8	...	...	...	26	60		
154	85,729	43,947	41,792	85,729	1	...	8	11	6	13	2	2	4	8	3	2	5	...	...	...	...	...	1	34	91		
155	89,588	45,586	44,002	89,588	10	...	18	...	10	21	3	5	8	3	2	5	...	...	...	...	...	...	17	39	115		
156	51,766	27,185	24,581	51,766	...	1	1	...	1	...	...	1	1	1	...	...	...	...	...	...	...	...	1	4	6		
157	22,728	11,600	11,123	22,728	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	3	5	
158	6,730	3,545	3,185	6,730	1	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	16	11	27	
159	4,918	2,488	2,488	4,918	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
160	14,996	7,534	7,462	14,996	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Zemindaries ...																											
Total ...																											
161	1,668,006	860,173	807,833	1,668,006	74	73	147	53	71	124	42	80	72	35	31	66	84	53	67	112	53	63	112	790	790	1,580	
Chendragherry ...																											
Wallasahpettit ...																											
Wandewash ...																											
Arcot ...																											
Vellore ...																											
Polar ...																											
Gudiakun ...																											
Palmanair ...																											
Chittoor ...																											
M. T. Vellore ...																											
M. T. Wallajahpettit ...																											
Zemindaries ...																											
Total ...																											
173	170,238	85,032	85,201	170,238	9	11	20	15	13	28	13	28	41	26	25	51	26	25	51	56	32	24	66	227	225	452	
174	190,800	93,812	96,988	190,800	11	18	29	7	11	18	8	12	20	15	11	26	19	22	41	32	32	24	84	161	179	340	
175	163,801	75,986	77,516	163,801	8	14	22	6	10	16	7	4	11	18	10	36	24	12	36	21	14	35	173	134	307		
176	164,006	80,256	83,750	164,006	15	18	33	18	20	38	11	12	23	16	19	35	20	12	32	36	433	472	905				
177	261,008	127,800	133,129	261,008	40	42	82	28	42	70	34	19	53	22	22	44	26	19	45	80	34	64	533	531	1,064		
178	343,798	170,018	175,775	343,798	61	53	114	55	65	120	76	84	160	76	79	155	81	78	159	64	54	118	1,012	964	1,976		
179	249,678	125,220	124,458	249,678	36	36	72	38	33	66	89	35	74	86	46	82	38	38	76	62	39	89	101	797	764	1,561	

VII.—(Continued.)

Deaths registered from Small-pox in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873

No.	Population according to Census of 1871.	Districts.	Names of Rural Circles and Towns.	Population for which Returns were received.			July.			August.			September.			October.			November.			December.			Total.				
				Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.		
180	190,626	Salem (Contd.)	Dharampoo	95,080	95,546	190,626	23	27	50	29	23	52	26	25	51	34	20	54	37	31	71	41	34	75	284	243	527		
181	193,037		Oosoor	97,276	95,761	193,037	15	20	35	12	11	23	19	14	33	11	19	30	...	...	14	13	27	6	7	13	199	192	391
182	50,012		M. T. Salem	24,942	25,070	50,012	5	10	15	5	3	8	2	1	3	1	...	1	...	1	1	...	...	...	...	192	165	357	
	1,966,995		Total	975,502	991,493	1,966,995	223	249	472	208	231	439	235	234	469	255	251	506	285	253	539	292	240	532	4,011	3,869	7,880		
183	169,916	Coimbatore.	Sutheamungalum	84,321	85,595	169,916	31	30	61	35	28	63	23	20	43	24	15	39	21	10	31	32	29	61	325	289	614		
184	90,830		Collegal	48,157	42,673	90,830	2	...	2	2	8	10	2	...	2	2	1	3	...	2	2	...	...	...	12	16	28		
185	102,813		Bhowany	51,235	51,578	102,813	5	3	8	1	4	5	7	10	17	18	14	32	8	6	14	26	31	57	170	142	312		
186	223,363		Perindorai	...	...	223,363	12	10	22	8	8	16	15	9	24	16	11	27	6	8	14	18	8	26	366	289	655		
187	175,659		Caroor	86,200	89,459	175,659	9	1	10	6	4	10	4	6	10	5	5	10	1	1	2	5	2	7	76	59	135		
188	217,493		Dharampoo	107,881	109,612	217,493	9	7	16	6	3	9	5	14	19	5	5	10	3	4	7	5	6	11	119	133	252		
189	123,650		Oodanalapetta	60,662	63,188	123,650	10	7	17	5	2	7	6	1	7	1	4	5	1	4	5	6	4	10	94	94	188		
190	167,546		Pollachy	82,604	84,942	167,546	13	26	39	14	15	29	15	24	39	14	14	28	6	4	10	5	7	12	244	239	483		
191	208,685		Coimbatore	102,544	106,141	208,685	28	22	50	24	19	43	24	18	42	8	4	12	5	1	6	12	10	22	282	281	563		
192	237,808		Palladam	117,194	120,614	237,808	9	16	25	7	13	20	15	16	31	33	16	49	6	10	16	15	18	33	224	246	470		
193	35,310		M. T. Coimbatore	17,096	18,214	35,310	2	...	2	...	1	1	2	...	2	...	...	2	...	...	...	...	...	...	...	64	50	104	
194	10,201		M. T. Erode	...	...	10,201	3	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	33	26	59	
	1,763,274		Total	874,975	888,299	1,763,274	133	122	255	108	105	213	118	118	236	126	89	215	57	50	107	124	115	239	1,979	1,864	3,843		
195	36,461	Neigher-ries.	Neigherries	20,269	16,192	36,461	3	2	5	4	1	5	...	1	...	...	...	...	...	...	...	...	...	...	12	7	19		
196	9,982		M. T. Ootacamund	5,265	4,717	9,982	...	2	2	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	3	6	9		
197	3,058		M. T. Ootacamund	1,558	1,400	3,058	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	3	5		
	49,501	Total	27,192	22,309	49,501	3	4	7	4	1	5	1	1	2	...	...	1	...	...	...	...	...	...	17	16	33			
198	113,713	South Canara.	Kundapuram	55,878	57,835	113,713	3	1	4	...	...	...	...	...	...	2	...	1	2	...	...	...	1	1	28	24	52		
199	231,579		Udipi	114,329	117,241	231,579	2	1	3	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	60	83	143		
200	213,067		Mangalore	107,022	106,045	213,067	12	11	23	2	6	8	...	6	...	...	...	...	...	...	...	...	...	...	89	80	169		
201	107,722		Uppanangadi	55,625	62,097	107,722	8	6	13	31	20	51	...	1	1	8	5	13	3	4	7	1	1	2	59	41	100		
202	232,578		Kassergode	111,687	110,891	232,578	4	4	8	1	3	4	1	1	2	10	6	16	13	12	25	13	6	19	84	71	155		
203	29,712		M. T. Mangalore	15,188	14,524	29,712	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2		
	918,362	Total	459,729	458,633	918,362	29	22	51	34	29	63	7	2	9	23	14	37	16	16	32	16	18	34	321	300	621			
204	248,118	Er.	Cherical	122,190	125,928	248,118	2	...	2	1	1	2	5	4	9	4	4	8	5	4	9	31	20	51	74	61	125		
205	123,057		Kotyan	60,749	62,308	123,057	1	2	3	11	6	17	9	13	22	9	8	17	12	5	4	10	4	14	81	62	133		
206	125,938		Wynaad	62,228	63,710	125,938	2	2	4	11	4	15	6	...	6	4	2	6	5	1	6	9	3	12	51	16	67		
207	243,751		Kurambanad	121,560	122,191	243,751	14	12	26	13	8	21	3	3	6	6	2	8	4	1	5	11	3	14	152	99	251		
208	141,806		Calicut	70,126	71,680	141,806	8	2	10	...	...	...	1	1	2	2	1	4	5	9	5	14	18	7	25	250	121	371	
209	237,936		Ernad	145,465	142,471	287,936	9	2	11	4	5	9	4	...	4	9	7	16	6	3	9	10	6	16	313	196	509		
210	292,482		Valuvannad	144,796	147,686	292,482	23	11	34	22	9	31	10	12	22	10	3	13	15	4	19	21	15	39	225	142	367		

VIII.

Deaths registered from Fevers in the Rural Circles and Towns of the Madras Presidency during each month of the year 1873.

No.	Population according to Census of 1871.	Districts.	Names of Rural Circles and Towns.	Population for which Returns were received.			January.			February.			March.			April.			May.			June.		
				Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
1	158,061	Gajaliam.	Goomsoor ...	79,800	78,761	158,061	118	113	231	83	66	149	112	73	185	86	77	163	56	46	102	41	41	85
2	222,275		Berhampore ...	109,124	113,151	222,275	82	82	164	80	80	160	103	79	182	98	90	188	67	48	115	70	53	123
3	153,507		Chicacole ...	77,084	76,423	153,507	92	76	168	84	79	163	67	41	108	47	48	95	58	49	107	50	39	89
4	15,587		M. T. Chicacole ...	7,341	8,246	15,587	6	11	17	9	7	16	4	4	8	5	3	8	9	6	14	2	2	2
5	21,670		M. T. Berhampore...	10,733	10,937	21,670	7	10	17	10	9	19	11	8	19	4	9	13	2	7	9	6	6	11
6	817,876		Zemindaries ...	347,431	283,662	631,093	520	481	1,001	353	273	626	365	316	681	161	235	396	203	170	373	206	187	393
	1,388,976		Total ...	631,013	571,180	1,202,193	825	773	1,598	619	514	1,133	662	521	1,183	401	462	863	395	325	720	377	326	703
7	155,699	Vizagapatnam.	Palcondah ...	73,573	71,480	145,053	131	94	225	78	65	143	72	73	145	68	55	123	60	41	101	61	59	120
8	135,606		Farvatiore ...	64,619	63,104	127,723	107	95	202	62	51	113	59	38	97	48	37	85	33	19	52	35	33	68
9	139,289		Bobbili ...	49,754	47,134	96,888	49	36	85	34	19	53	28	12	40	37	22	59	20	20	40	31	15	46
10	77,364		Salur ...	35,270	34,751	70,021	63	42	105	16	16	32	18	13	27	28	23	51	12	11	23	22	13	35
11	117,276		Vizianagrum ...	42,192	39,432	81,624	55	46	101	35	20	55	14	9	27	29	22	51	29	21	50	27	12	39
12	97,675		Bimlipatam ...	41,284	39,040	80,324	48	27	75	30	30	60	31	25	59	27	19	46	27	30	57	29	26	55
13	48,637	Godavary.	Vizagapatnam ...	23,356	22,469	45,825	30	18	48	6	7	13	9	10	19	10	14	24	9	13	22	11	13	24
14	165,499		Ankapilly ...	64,606	60,057	124,663	64	48	112	50	43	93	25	21	46	32	29	61	51	34	85	47	41	88
15	32,191		M. T. Vizagapatnam ..	15,703	16,488	32,191	10	19	29	29	21	31	9	1	18	7	4	11	8	4	12	10	4	14
16	8,744		M. T. Bimlipatam ...	4,318	4,426	8,744	1	2	3	1	1	1	1	1	2	1	2	3	1	2	3	2	2	4
17	20,169		M. T. Vizianagrum ...	9,936	10,233	20,169	24	11	35	12	10	22	18	9	27	28	13	41	25	10	35	11	14	25
18	8,812		M. T. Palcondah ...	4,413	4,399	8,812	12	16	28	5	2	7	1	5	6	2	4	6	3	4	7	2	2	4
19	837,760		Zemindaries ...	351,125	335,805	686,930	396	330	726	275	201	476	178	120	298	180	165	345	197	190	387	189	182	371
	1,844,711		Total ...	780,149	748,818	1,528,967	990	784	1,774	614	485	1,099	466	345	811	497	409	906	475	399	874	477	418	896
20	109,163	Godavary.	Rajahmundry...	55,800	53,363	109,163	110	109	219	57	36	93	39	36	75	28	21	49	22	21	43	21	30	51
21	111,459		Peddapore ...	55,388	56,101	111,489	119	95	214	43	58	101	53	56	109	26	31	57	54	43	97	46	28	74
22	203,583		Ramachendrapore ...	102,136	101,447	203,583	105	79	184	65	50	115	66	57	123	60	41	101	69	42	111	49	37	86
23	206,885		Annapore ...	105,045	101,840	206,885	70	59	129	48	47	95	48	23	71	38	41	79	44	49	93	45	39	84
24	177,876		Narasapore ...	89,768	88,108	177,876	40	33	76	19	20	39	22	14	36	17	17	34	20	19	39	21	28	49
25	111,388		Ellore ...	56,789	54,599	111,388	122	116	238	53	50	103	41	40	81	37	26	63	44	38	82	44	45	88
26	92,457	Godavary.	Undi ...	46,342	46,115	92,457	29	19	48	17	22	39	18	9	27	15	14	29	10	11	21	15	20	35
27	167,491		Tanuku ...	83,757	83,734	167,491	74	53	127	38	34	72	36	32	68	45	37	82	27	39	66	41	61	105
28	145,715		Yernagudem...	72,866	72,849	145,715	148	99	247	95	46	141	56	42	98	28	48	76	33	32	65	59	39	98
29	17,839		M. T. Cocanada ...	9,095	8,744	17,839	2	...	2	3	1	4	2	1	3	2	2	4	1	...	1	3	...	3
30	19,738		M. T. Rajahmundry...	10,455	9,283	19,738	...	3	...	2	...	2	...	...	...	3	...	3	...	4	...	...	...	5
31	26,487		M. T. Ellore ...	13,788	11,699	25,487	...	6	...	3	...	6	...	2	...	1	...	3	...	...	...	...	...	1
32	203,828		Zemindaries ...	102,874	101,454	203,828	141	106	247	82	53	135	81	61	142	52	50	102	48	56	104	46	40	86
	1,592,989		Total ...	803,603	789,336	1,592,939	966	771	1,737	524	420	944	463	373	836	352	331	683	376	350	726	391	371	762

33	106,452	64,164	52,268	106,452	68	49	117	41	26	67	27	19	46	15	19	34	18	17	36	15	14	29
34	83,081	42,184	40,947	83,081	45	41	86	36	22	58	25	20	45	25	15	40	18	13	31	28	16	44
35	87,138	43,473	43,665	87,138	26	10	86	11	10	21	16	11	27	9	12	21	14	9	23	6	7	13
36	128,837	65,479	62,868	128,837	23	19	42	18	6	24	16	14	14	10	14	24	19	5	24	10	16	26
37	169,912	86,268	82,644	169,912	29	30	59	28	20	48	30	21	51	24	23	41	20	21	41	23	24	47
38	143,629	73,747	69,882	143,629	66	50	116	34	21	55	38	24	62	33	35	68	35	29	64	30	28	53
39	120,619	61,890	58,989	120,619	79	48	127	89	41	80	56	46	102	42	42	72	50	53	108	49	38	87
40	120,658	60,568	58,543	120,658	128	120	243	55	54	109	74	38	112	49	32	81	52	38	85	47	52	99
41	101,728	52,384	49,344	101,728	98	57	155	28	24	52	38	33	71	36	17	53	28	22	50	31	20	61
42	108,964	55,074	53,890	108,964	60	44	104	40	24	64	40	24	64	29	24	53	26	16	42	29	22	51
43	18,083	9,074	8,959	18,083	4	2	6	1	1	2	1	1	2	3	3	6	1	5	6	3	1	4
44	36,188	17,268	16,920	36,188	5	2	7	3	4	7	3	1	4	7	1	8	3	2	5	...	6	6
45	163,127	83,107	80,020	163,127	96	104	200	63	54	117	39	36	75	64	42	106	81	27	58	47	56	103
46	1,452,374	737,495	714,879	1,452,374	796	629	1,425	417	321	798	432	301	733	374	269	643	346	273	619	342	315	657
Total ...																						
47	195,068	98,880	96,388	195,068	75	52	127	42	39	81	39	30	69	48	37	85	41	33	74	43	49	92
48	188,375	70,591	67,784	188,375	42	32	74	29	26	55	33	26	59	22	22	44	25	22	47	38	38	69
49	81,336	42,011	39,325	81,336	13	16	29	25	15	40	42	21	63	12	17	29	18	20	38	17	12	29
50	149,847	76,329	74,518	149,847	55	40	95	20	18	38	37	31	68	27	19	46	21	17	38	22	20	42
51	147,141	76,329	70,504	147,141	44	27	71	22	23	45	36	43	99	38	31	69	39	34	73	27	30	57
52	63,885	33,131	30,754	63,885	32	15	47	23	19	42	16	15	31	14	17	31	29	22	51	21	16	37
53	103,802	53,541	50,261	103,802	30	46	76	28	16	44	22	25	47	31	18	49	20	20	40	15	23	38
54	100,985	52,519	48,466	100,985	10	21	31	13	6	19	10	4	14	5	7	12	3	7	10	9	14	28
55	127,258	65,953	61,305	127,258	32	25	57	19	22	41	14	18	32	20	18	38	22	18	40	21	13	34
56	29,922	14,879	15,043	29,922	3	...	3	2	2	4	6	1	7	2	2	4	3	...	3	5	2	7
57	296,192	124,121	115,071	296,192	193	191	394	130	103	293	135	138	273	123	120	248	104	106	213	128	103	231
Total ...																						
58	1,376,811	707,392	689,419	1,376,811	529	465	994	353	289	642	410	352	762	342	308	650	325	301	626	339	320	659
Total ...																						
59	397,552	194,876	202,876	397,552	102	117	219	91	118	209	106	100	205	104	112	216	97	125	122	113	102	215
Total ...																						
59	104,210	53,204	51,006	104,210	32	45	77	26	25	51	24	26	50	18	17	35	19	21	40	21	20	41
60	149,898	76,963	72,915	149,898	36	42	78	34	31	65	40	31	71	41	29	70	24	19	43	35	26	60
61	186,404	93,567	92,547	186,404	39	32	71	29	37	66	48	41	89	41	36	77	26	38	65	32	37	69
62	132,328	67,653	64,875	132,328	40	46	86	37	33	70	26	29	55	30	29	59	44	37	81	38	28	64
63	137,308	100,463	96,855	137,308	53	38	91	56	50	106	51	45	96	42	42	91	39	42	81	30	53	83
64	130,709	65,566	65,143	130,709	93	20	53	46	32	78	43	29	71	30	24	54	28	30	58	35	30	65
65	37,327	18,252	19,075	37,327	2	4	6	2	3	5	3	1	4	4	9	13	12	14	26	5	7	12
Total ...																						
66	988,184	475,968	462,216	988,184	235	227	462	230	211	441	234	202	436	206	193	399	192	202	394	194	201	395
67	289,754	122,412	117,842	289,754	26	20	46	55	36	91	33	86	69	46	42	88	51	51	102	45	33	77
68	164,667	83,671	81,086	164,667	28	32	60	48	47	96	144	125	269	155	146	301	147	138	280	94	79	173
69	236,108	120,178	115,930	236,108	46	32	78	38	43	81	53	51	104	49	57	106	57	49	106	70	45	115
70	244,559	123,269	121,290	244,559	73	60	133	75	66	141	56	55	111	55	45	101	75	56	131	69	72	141
71	289,183	118,620	120,613	289,183	43	45	88	47	34	81	39	34	73	43	36	79	34	34	68	32	30	62
71	176,504	89,496	89,009	176,504	73	48	121	60	49	109	50	52	102	62	60	122	65	39	104	60	53	103

VIII.—(Continued.)

Deaths registered from Fevers in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873.

No.	Population according to Census of 1871.	Districts.	Names of Rural Circles and Towns.	Population for which Returns were received.		January.			February.			March.			April.			May.			June.			
				Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
72	196,566	Cuddalore.	Kullacoorchi ...	99,373	97,193	196,566	71	72	143	56	57	113	50	46	96	59	51	110	52	47	99	50	30	80
73	216,246		Yellavanasoor ...	109,599	106,647	216,246	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
74	40,290		M. T. Cuddalore	19,505	20,785	40,290	4	3	7	7	8	15	7	5	12	1	9	10	4	8	12	5	5	10
	1,755,817		Total	885,922	869,895	1,755,817	401	344	745	426	385	811	517	446	963	553	519	1,072	548	477	1,025	507	415	922
75	237,893	Trichinopoly.	Woodiarpollim	119,998	117,895	237,893	83	86	169	67	57	124	73	54	127	76	75	151	60	65	125	51	63	114
76	218,660		Trichinopoly ...	109,599	106,647	216,246	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
77	228,313		Kullitali	113,233	115,080	228,313	40	61	101	22	21	43	28	34	62	29	22	51	38	32	70	40	33	73
78	257,174		Mooseri	133,299	133,299	257,174	93	69	162	53	47	100	55	59	114	54	50	104	48	63	111	92	62	154
79	170,567	Trichinopoly.	Perambalor ...	83,837	86,730	170,567	65	67	132	43	49	92	39	38	77	60	61	121	54	56	110	48	45	93
80	76,530		M. T. Trichinopoly	39,597	76,530	111	13	24	3	4	1	5	3	3	6	2	2	4	2	2	10	9	13	22
81	11,271		M. T. Streerungum...	11,271	11,271	11,271	1	2	3	4	1	5	3	3	6	2	2	4	2	2	4	2	...	2
	1,200,408		Total	588,134	612,274	1,200,408	449	440	889	296	282	578	315	308	623	330	321	651	339	355	694	359	328	687
82	107,459	Tanjore.	Sheally ...	52,720	54,739	107,459	8	7	15	11	6	17	9	8	17	9	13	22	12	13	25	16	13	29
83	198,193		Mayaveram	96,110	102,083	198,193	27	24	51	16	18	34	26	19	45	23	20	43	22	21	43	22	23	45
84	207,407		Nunilam	98,551	108,856	207,407	6	9	15	12	9	21	13	9	22	8	14	22	16	7	23	8	12	20
85	152,208		Negapatam	72,379	79,829	152,208	16	21	37	17	16	33	10	13	23	17	18	35	22	20	42	18	18	36
86	154,714	Tanjore.	Tritrapundy	76,177	78,537	154,714	14	14	28	20	19	39	12	17	29	16	18	34	16	19	35	12	7	19
87	237,423		Puttucottah	115,777	121,646	237,423	30	17	47	21	5	26	18	17	35	23	20	43	10	13	23	12	13	25
88	292,164		Tanjore...	141,444	150,720	292,164	49	51	100	49	36	85	47	38	85	39	46	85	57	53	110	61	37	98
89	296,590		Combaconum	144,020	152,570	296,590	60	59	119	37	34	71	36	49	85	42	41	83	44	50	94	42	37	79
90	143,561	Tanjore.	Mannargoody ...	69,314	74,247	143,561	13	12	25	6	8	14	17	9	26	10	10	20	8	16	13	14	27	24
91	62,175		M. T. Tanjore	25,726	26,449	52,175	15	11	26	12	8	20	11	6	17	14	14	28	13	11	24	4	9	13
92	44,444		M. T. Combaconum...	21,569	22,875	44,444	2	3	5	2	...	2	3	1	4	5	7	12	7	8	15	7	12	19
93	21,165		M. T. Mayaveram	10,407	10,758	21,165	6	2	8	3	4	7	4	3	7	7	5	8	1	...	1	...	5	5
94	48,525	Madras.	M. T. Negapatam	21,250	27,275	48,525	13	15	28	5	13	18	4	7	11	6	5	10	5	...	...	...	...	
95	17,703		M. T. Mannaargoody..	8,524	9,179	17,703	2	...	2	...	4	4	1	2	3	1	...	1	...	1	...	...	...	
	1,973,731		Total	953,968	1,019,763	1,973,731	261	245	506	211	180	391	211	198	409	218	229	447	233	239	462	222	206	428
96	311,501		Madras.	Dindigul	153,199	158,302	311,501	116	71	187	53	62	115	60	64	124	64	55	119	68	54	122	59	70	129
97	128,983	Mayalur ...		63,332	65,651	128,983	13	16	29	14	6	20	6	17	23	9	7	16	9	15	24	11	12	23
98	179,431	Madura...		88,326	91,105	179,431	44	44	88	24	27	51	34	22	56	26	11	37	26	19	45	28	23	51
99	241,215	Terunungalum		120,724	120,491	241,215	76	69	145	57	44	101	48	47	95	46	49	95	45	51	96	32	44	76
100	217,418	Madras.	Peraccolun	107,073	110,345	217,418	57	67	124	53	56	109	48	56	104	51	56	107	50	44	94	55	49	104
101	184,831		Pulni	91,077	93,754	184,831	49	37	86	35	42	77	41	24	65	30	24	54	37	21	61	37	17	54
102	...		Settanandel Villages	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
103	51,987		M. T. Madura	26,224	25,763	51,987	14	9	23	2	5	7	7	6	13	4	7	11	6	6	12	5	9	14
104	12,865	M. T. Dindigul	6,540	6,325	12,865	9	14	23	5	7	12	8	8	16	6	1	7	5	5	10	3	4	7	

106	504,131	246,574	267,557	504,131	156	189	295	104	99	208	92	67	169	77	68	145	56	43	104	59	68	122
106	494,253	208,997	225,356	494,253	51	64	115	81	40	71	48	43	91	80	89	69	43	47	90	81	29	60
	2,266,615	1,112,068	1,154,549	2,266,615	531	531	1,116	378	388	766	392	354	746	343	317	660	846	314	660	320	320	640
107	176,954	88,263	88,691	176,954	33	27	60	20	11	31	14	23	37	25	16	41	9	8	17	1	5	6
108	156,862	78,467	78,939	156,862	35	48	88	88	34	65	51	47	98	34	33	67	30	40	70	15	31	46
109	286,911	142,862	143,949	286,911	70	78	148	47	41	88	40	39	79	36	37	73	36	48	84	38	35	73
110	284,346	112,704	121,642	284,346	69	72	141	25	31	66	42	46	87	32	36	68	13	20	83	31	24	55
111	178,078	77,025	81,083	178,078	38	28	66	23	25	43	32	16	48	34	18	47	29	5	84	16	14	30
112	163,216	77,640	86,575	163,216	38	26	49	24	22	46	17	17	34	17	13	29	16	19	39	32	17	39
113	122,001	61,010	60,991	122,001	36	43	79	24	25	49	21	19	40	21	16	37	22	15	37	14	18	27
114	182,018	90,214	91,804	182,018	44	31	75	33	27	59	36	27	63	27	36	63	19	27	46	24	28	41
115	145,120	73,651	71,469	145,120	35	29	64	15	17	32	21	24	45	15	10	25	10	15	25	14	2	42
116	21,044	10,549	10,549	21,044	4	5	9	2	3	5	7	2	9	1	2	3	2	3	5	6	1	8
117	17,945	8,847	9,098	17,945	1	5	5	6	2	2	10	5	15	10	8	13	1	3	4	2	3	8
118	10,565	5,283	5,282	10,565	2	5	7	2	2	4	6	5	11	10	8	13	8	9	17	2	...	3
	1,693,959	836,515	857,444	1,693,959	390	397	787	247	238	485	297	269	566	262	217	479	195	212	407	183	190	378
119	101,866	52,269	49,597	101,866	133	120	253	71	55	126	87	51	138	83	59	142	76	49	125	64	50	114
120	92,665	47,213	45,452	92,665	60	49	109	57	58	115	38	40	78	37	33	70	43	14	57	30	14	44
121	115,747	58,765	56,932	115,747	71	77	148	28	22	50	68	70	138	76	44	120	43	85	78	42	39	81
122	71,066	36,249	34,817	71,066	55	36	90	20	31	61	47	39	86	43	40	83	39	23	62	25	27	52
123	98,844	49,964	48,964	98,844	51	54	105	54	35	89	66	71	137	55	39	94	53	51	104	38	35	73
124	173,434	89,868	83,568	173,434	90	77	167	69	50	119	66	64	116	80	91	171	86	86	172	97	85	182
125	120,616	62,688	58,028	120,616	104	105	209	61	45	109	76	54	180	55	52	107	63	70	133	64	52	116
126	107,320	54,552	52,798	107,320	82	65	147	53	63	108	80	68	148	89	63	143	72	52	124	63	66	129
127	25,579	13,496	13,063	25,579	37	57	94	29	27	56	17	28	45	21	17	38	13	16	29	12	11	23
128	7,295	3,556	3,639	7,295	9	7	16	8	4	7	6	4	10	9	6	15	7	...	...	...	...	...
128A	45,208	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	959,640	467,640	446,792	914,332	692	646	1,338	445	380	825	551	475	1,026	543	434	982	495	399	894	438	388	826
129	102,744	52,224	50,520	102,744	63	62	125	47	47	94	53	54	107	38	30	68	35	14	49	29	19	48
130	98,051	48,067	44,984	98,051	45	39	85	32	26	58	32	24	56	27	15	42	45	29	74	29	24	53
131	76,667	39,260	37,417	76,667	24	24	43	23	15	38	23	11	34	38	31	69	35	28	68	23	24	47
132	145,180	74,565	70,615	145,180	79	68	147	63	66	119	64	55	119	74	70	144	75	76	161	62	67	129
133	145,591	74,640	70,951	145,591	72	68	140	50	45	95	87	52	139	64	50	114	70	69	139	60	63	123
134	128,162	66,806	61,866	128,162	45	20	65	63	32	95	51	41	32	48	50	98	42	35	77	41	25	66
135	135,468	69,102	66,366	135,468	64	51	115	40	31	71	47	40	87	53	48	101	50	59	109	56	57	113
136	140,948	73,693	68,255	140,948	74	70	144	35	44	79	69	48	117	61	55	116	73	59	132	70	61	131
137	110,405	57,284	53,121	110,405	39	32	71	50	32	82	47	51	98	35	25	60	38	44	82	40	25	65
138	109,965	56,444	53,521	109,965	44	40	84	31	36	67	88	42	80	43	40	72	32	39	71	38	89	72
139	146,738	74,496	72,242	146,738	61	41	102	46	40	86	41	40	81	45	40	85	39	28	67	38	28	66
140	16,275	8,329	7,946	16,275	29	18	47	14	19	33	20	26	46	15	13	28	19	8	27	14	11	25
	1,351,194	693,400	657,794	1,351,194	640	533	1,173	494	423	917	572	494	1,056	541	456	997	553	488	1,041	495	443	988
141	180,478	66,704	63,774	180,478	23	24	47	17	26	43	19	15	34	9	21	80	30	27	57	30	24	54
142	168,860	81,680	77,170	168,860	37	39	76	31	20	51	27	31	58	26	26	52	26	23	49	26	22	48
143	98,280	51,052	47,178	98,280	29	19	48	10	6	16	14	10	24	19	15	34	24	18	42	13	14	27

VIII.—(Continued.)
Deaths registered from Fevers in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873.

No.	Population according to Census of 1871.	Districts.	Names of Rural Circles and Towns.	Population for which Returns were received.			January.			February.			March.			April.			May.			June.		
				Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
Bellary.—(Continued.)																								
144	137,838		Ghooty ...	71,693	66,145	137,838	27	28	55	20	22	42	23	17	40	29	14	43	46	27	72	25	39	64
145	117,211		Tadpatri ...	59,945	57,266	117,211	11	2	13	1	5	6	5	4	9	6	4	10	3	8	11	8	11	19
146	97,843		Anantapore ...	51,095	46,748	97,843	17	10	27	19	16	35	19	12	31	10	20	20	10	16	26	16	8	24
147	98,424		Hospett...	47,605	45,819	93,424	81	117	198	74	67	141	69	68	137	70	63	129	65	64	129	45	46	90
148	120,608		Dharmavaram ...	63,095	57,513	120,608	43	33	76	47	39	86	45	46	91	26	31	57	24	30	64	38	40	78
149	88,754		Pennakondah ...	46,182	42,572	88,754	36	25	61	28	21	49	19	9	28	23	22	45	27	19	46	31	19	50
150	87,895		Hindupur ...	45,200	42,695	87,895	34	38	72	24	13	37	39	51	90	33	32	65	22	16	37	21	28	49
151	79,458		Madakasara ...	40,838	38,620	79,458	7	6	13	...	...	...	6	11	17	...	...	...	...	...	...	...	...	...
152	87,779		Royadroog ...	45,938	41,841	87,779	28	37	65	19	20	39	36	31	67	24	15	39	29	30	60	31	32	63
153	93,228		Kudleghee ...	47,351	45,877	93,228	30	22	52	17	16	33	32	31	63	34	26	60	22	18	40	27	25	52
154	85,729		Hurpunnallee ...	43,947	41,782	85,729	6	2	8	6	8	14	1	6	6	8	5	13	10	6	16	7	6	13
155	89,538		Hurpunnallee ...	45,536	44,002	89,538	23	15	38	12	15	27	7	15	22	6	8	14	13	10	23	1	8	9
156	61,766		M. T. Bellary ...	27,185	24,581	51,766	4	6	10	3	6	9	13	8	21	6	9	15	9	6	15	9	14	23
157	22,723		M. T. Adoni ...	11,600	11,123	22,723	11	6	17	11	10	21	11	6	16	11	8	19	7	8	16	6	13	19
158	6,730		M. T. Ghooty ...	3,545	3,185	6,730	3	2	5	6	3	9	3	2	5	1	2	3	1	4	5	...	4	4
159	4,918		M. T. Anantapore ...	2,438	2,480	4,918	...	...	...	...	...	...	1	1	2	2	2	2	...	...	...	...	...	...
160	14,996		Zemindaries ...	7,534	7,462	14,996	12	10	22	11	4	15	12	10	22	14	6	20	12	5	17	10	10	20
Total ...				860,173	807,833	1,668,006	462	441	903	356	317	673	401	382	783	357	309	666	379	383	713	346	362	708
North Arcot.																								
161	99,628		Chendragherri ...	51,042	48,586	99,628	35	23	58	21	20	41	40	44	84	22	18	40	22	27	49	33	38	71
162	204,101		Wallajahpett ...	103,172	100,929	204,101	61	62	123	84	58	142	59	71	130	66	60	126	46	47	93	53	55	108
163	153,507		Wandiwash ...	77,197	76,310	153,507	35	41	76	23	30	53	22	21	43	25	34	59	46	35	81	37	29	68
164	157,391		Arcoot ...	78,564	76,827	157,391	24	28	52	45	33	78	35	36	71	36	46	82	80	81	61	37	34	71
165	141,134		Vellore ...	70,850	70,284	141,134	246	269	515	187	202	389	187	179	366	286	278	564	211	223	434	201	177	378
166	109,150		Polar ...	54,820	54,330	109,150	84	87	171	82	102	184	127	135	262	140	172	312	114	121	235	82	85	167
167	162,980		Gudlathum ...	82,466	80,514	162,980	144	132	276	106	91	197	179	181	360	162	188	350	218	245	463	154	165	319
168	60,311		Palmanair ...	30,702	29,509	60,211	40	34	74	37	33	70	29	29	58	29	37	66	34	39	73	47	52	99
169	213,045		Chittoor ...	109,588	103,457	213,045	66	58	124	71	64	135	101	69	170	67	97	104	72	65	137	58	49	107
170	38,032		M. T. Vellore ...	18,139	19,883	38,022	24	18	42	14	19	33	15	10	25	14	15	29	21	23	44	16	10	26
171	12,103		M. T. Wallajahpett ...	5,831	6,272	12,103	...	...	...	1	1	2	...	1	1	...	...	...	...	2	3	6	1	1
172	664,006		Zemindaries ...	338,307	325,699	664,006	308	299	607	253	222	480	266	263	519	300	244	544	200	286	576	291	297	588
Total ...				1,020,678	994,600	2,015,278	1,067	1,051	2,118	929	875	1,804	1,060	1,029	2,089	1,147	1,129	2,276	1,006	1,145	2,251	1,009	1,012	2,021
Kistnagherry.																								
173	170,233		Kistnagherry ...	85,032	85,201	170,233	111	118	229	53	50	103	69	68	137	87	98	185	110	78	188	60	55	115
174	190,800		Triptakore ...	93,812	96,986	190,800	164	153	317	172	194	366	212	229	441	227	259	486	266	273	639	177	183	369
175	153,801		Utangherry ...	75,986	77,815	153,801	71	63	134	81	74	155	101	79	180	89	77	166	92	100	192	84	81	165
176	164,906		Athoor ...	80,256	83,750	164,006	104	101	205	98	73	176	96	92	188	69	51	120	62	50	112	66	76	142

177	261,009	Namamul	137,880	188,139	261,009	284	310	594	986	287	533	216	247	463	164	164	398	151	1,042	2,151	857	841	1,888
178	343,793	Salem	170,018	173,776	343,793	169	162	811	166	131	297	192	139	331	154	99	253	119	1,042	2,151	857	841	1,888
179	249,678	Trichengode	135,320	124,453	249,678	198	142	335	113	114	227	155	128	284	85	71	156	108	1,042	2,151	857	841	1,888
180	190,626	Dharampore	96,080	96,546	190,626	132	96	218	115	92	207	97	78	175	76	83	168	109	1,042	2,151	857	841	1,888
181	193,087	Oosoor	97,276	96,761	193,087	92	74	166	87	80	167	74	68	137	79	68	147	88	1,042	2,151	857	841	1,888
182	50,012	M. T. Salem	24,942	25,070	50,012	16	13	29	8	10	18	5	11	16	4	10	14	9	1,042	2,151	857	841	1,888
	1,966,995	Total	975,502	991,493	1,966,995	1,316	1,222	2,533	1,159	1,090	2,249	1,217	1,185	2,352	1,033	980	2,013	1,109	1,042	2,151	857	841	1,888
183	169,916	Sethiamungalum	84,321	86,595	169,916	86	32	68	76	47	123	61	48	109	51	52	108	64	1,042	2,151	857	841	1,888
184	80,890	Collegal	46,157	42,673	80,890	39	38	77	23	17	40	35	23	53	48	34	82	32	1,042	2,151	857	841	1,888
185	102,813	Bhorany	51,235	51,578	102,813	34	38	72	41	37	78	47	31	78	45	28	73	31	1,042	2,151	857	841	1,888
186	223,868	Perundurai	...	...	223,868	60	59	119	93	29	131	43	34	76	67	42	109	55	1,042	2,151	857	841	1,888
187	175,959	Caroor	86,200	89,459	175,959	65	59	124	36	23	59	47	29	76	34	38	73	21	1,042	2,151	857	841	1,888
188	217,493	Dharampore	107,831	109,612	217,493	45	35	80	34	32	68	41	29	70	34	28	63	25	1,042	2,151	857	841	1,888
189	123,650	Odamalaperiah	60,462	63,183	123,650	31	25	56	16	13	38	21	11	82	31	14	45	14	1,042	2,151	857	841	1,888
190	167,546	Pollachi	82,604	84,943	167,546	79	75	154	61	47	108	66	46	112	41	36	77	45	1,042	2,151	857	841	1,888
191	208,685	Coimbatore	102,544	106,141	208,685	41	31	72	37	34	71	55	35	90	45	27	72	33	1,042	2,151	857	841	1,888
192	237,808	Palladam	117,194	120,614	237,808	78	55	133	43	47	90	55	53	108	47	62	109	50	1,042	2,151	857	841	1,888
193	35,310	M. T. Coimbatore	17,096	18,214	35,310	5	4	9	...	...	...	3	3	5	1	3	9	3	1,042	2,151	857	841	1,888
194	10,201	M. T. Erode	...	...	10,201	4	2	6	...	3	...	3	1	4	2	3	5	1	1,042	2,151	857	841	1,888
	1,763,274	Total	874,975	888,299	1,763,274	517	453	970	459	398	787	475	343	818	446	372	818	373	309	683	402	340	742
195	36,461	Nelgherries	20,269	16,192	36,461	15	8	23	8	3	11	10	8	18	12	9	21	14	11	25	32	20	52
196	9,963	M. T. Ottacamund	5,265	4,717	9,963	4	3	7	3	5	8	3	5	8	4	2	6	3	8	11	4	4	8
197	3,058	M. T. Coonor	1,658	1,400	3,058	1	...	1	...	...	...	...	...	...	1	2	3	...	3	3	...	...	...
	49,501	Total	27,192	22,309	49,501	20	11	31	11	8	19	13	13	26	17	13	30	17	23	39	36	24	60
198	113,713	Kundapoor	55,878	57,885	113,713	34	32	66	18	14	32	18	16	34	20	24	44	23	17	40	18	20	38
199	231,570	Udipi	114,329	117,241	231,570	19	23	42	20	20	40	15	13	26	20	13	33	11	11	22	15	10	25
200	213,667	Mangalore	107,023	106,045	213,667	62	45	107	39	27	68	48	29	77	23	27	50	29	29	58	45	43	88
201	107,723	Uppanangadi	56,697	62,097	107,723	51	45	96	40	23	82	41	32	73	34	39	73	34	40	74	46	54	108
202	222,573	Kasarode	111,637	110,391	222,573	47	45	92	39	42	62	13	16	34	27	34	61	26	17	...	43	63	98
203	29,712	M. T. Mangalore	15,168	14,524	29,712	5	6	11	2	2	4	2	2	4	5	...	5	...	...	...	2	3	5
	918,362	Total	459,729	458,533	918,362	213	196	414	158	128	286	142	108	260	129	187	266	123	114	237	180	132	362

VIII.—(Continued.)
Deaths registered from Fevers in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873.

No.	Population according to Census of 1871.	Districts.	Names of Rural Circles and Towns.	Population for which Returns were received.			July.			August.			September.			October.			November.			December.			Total.		
				Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
1	158,061	Gowdavery.	Gowdavery ...	79,300	78,761	158,061	54	36	90	44	48	92	69	44	113	8	7	15	65	50	115	791	647	1,438			
2	222,275		Barhampore ...	109,124	113,151	222,275	70	48	118	94	78	167	48	54	102	76	62	138	60	43	103	920	772	1,692			
3	183,507		Chicacole ...	77,084	76,423	153,507	46	46	92	62	76	138	42	59	101	68	48	116	78	71	144	764	712	1,476			
4	15,587		M. T. Chicacole ...	7,941	8,246	15,587	4	1	5	7	2	9	7	7	14	5	8	13	8	6	13	72	53	125			
5	21,670		M. T. Barhampore ...	10,733	10,937	21,670	7	5	12	8	12	20	10	11	21	5	6	11	8	4	12	88	94	182			
6	817,876		Zemindaries ...	347,431	283,662	631,093	173	198	366	204	170	374	170	142	312	280	177	407	248	198	441	3,068	2,762	5,830			
7	1,398,976	Vizagapatnam.	Total ...	631,013	571,180	1,202,193	351	329	680	419	381	800	346	317	663	392	302	694	462	366	828	5,098	5,089	10,187			
8	155,689		Palcondah ...	73,873	71,490	145,363	71	41	112	64	60	124	55	50	105	88	54	142	92	60	152	910	706	1,616			
9	189,289		Parvatipore ...	64,619	63,104	127,723	80	44	124	63	46	109	54	45	99	61	55	116	66	31	96	732	631	1,363			
10	77,864		Bobbili ...	49,754	47,134	96,888	27	23	50	53	33	86	37	24	61	43	40	83	35	43	77	439	327	766			
11	117,276		Satur ...	35,270	34,751	70,021	20	11	31	22	22	44	23	21	44	25	14	39	20	20	40	308	324	632			
12	49,637		Vizagapatnam ...	42,192	39,432	81,624	28	31	57	20	29	48	41	29	69	30	26	56	27	33	62	39	85	379	319	698	
13	97,675	Godavery.	Bimlipatam ...	41,284	39,040	80,324	34	32	66	50	22	72	38	42	80	31	31	62	29	23	52	424	346	770			
14	166,499		Vizagapatnam ...	23,856	22,459	46,315	15	10	25	17	17	34	12	16	28	18	17	36	23	11	34	173	161	334			
15	32,191		Ankapilly ...	64,976	60,067	125,043	33	30	63	35	29	64	26	26	52	34	36	70	43	27	69	47	50	97	496	414	910
16	8,744		M. T. Vizagapatnam ...	15,703	16,498	32,191	8	4	12	18	7	25	10	10	20	14	11	25	10	8	18	7	5	12	121	106	227
17	20,169		M. T. Bimlipatam ...	4,318	4,226	8,544	3	8	11	13	11	24	3	3	6	3	1	4	2	2	5	3	1	24	45	69	113
18	8,812		M. T. Vizagapatnam ...	9,986	10,233	20,169	9	7	16	13	11	24	17	18	35	20	16	36	21	10	31	215	145	360			
19	887,750		M. T. Palcondah ...	4,413	4,399	8,812	1	2	3	4	7	11	3	6	9	4	3	7	8	7	10	50	63	113			
20	1,844,711	Godavery.	Total ...	851,125	835,805	1,686,930	185	191	376	230	198	478	248	257	506	274	224	498	287	261	548	2,906	2,554	5,460			
21	106,163		Rajahmundry ...	780,149	748,818	1,528,967	506	431	936	595	478	1,073	645	550	1,197	645	525	1,170	678	560	1,236	7,174	5,919	13,093			
22	206,583		Peddapore ...	55,800	53,363	109,163	29	24	53	37	41	78	38	37	75	106	106	210	133	121	264	655	620	1,275			
23	206,886		Rajahmundry ...	55,888	56,101	111,989	45	58	103	69	68	137	86	65	151	91	88	179	201	163	364	919	835	1,754			
24	177,876		Amalapuram ...	105,045	101,840	206,885	69	75	144	80	76	156	105	104	209	161	126	287	242	162	404	1,164	929	2,093			
25	111,388		Narasipore ...	89,768	88,108	177,876	23	32	55	34	38	72	30	31	61	52	41	93	73	57	130	887	796	1,683			
26	92,457	Godavery.	Ellore ...	66,789	64,699	131,488	39	41	80	54	56	110	48	39	87	241	217	458	244	220	464	1,015	923	1,937			
27	187,491		Undi ...	83,757	83,784	167,541	58	74	132	25	26	51	19	11	30	45	43	88	60	46	106	284	256	540			
28	145,715		Tannuku ...	72,866	72,849	145,715	46	57	103	68	66	134	66	57	123	297	286	583	264	230	494	1,332	1,001	2,333			
29	17,839		Yernagudem ...	9,095	8,744	17,839	1	2	3	2	4	6	1	...	...	1	3	4	6	3	9	26	13	39			
30	19,788		M. T. Coconada ...	10,455	9,283	19,738	1	2	3	8	5	13	3	...	...	3	12	15	18	6	24	51	24	75			
31	25,497		M. T. Rajahmundry ...	13,788	11,699	25,487	3	4	7	...	...	...	3	...	...	9	9	18	12	9	21	40	39	79			
32	208,828		Zemindaries ...	102,374	101,454	203,828	57	72	129	81	67	148	97	85	182	115	133	248	166	182	348	1,062	989	2,051			
33	1,592,939	Godavery.	Total ...	803,608	789,336	1,592,944	468	511	979	603	598	1,201	684	572	1,256	1,415	1,248	2,663	1,708	1,412	3,115	8,614	7,587	16,201			
34	106,163		Rajahmundry ...	55,800	53,363	109,163	29	24	53	37	41	78	38	37	75	106	106	210	133	121	254	655	620	1,275			
35	206,583		Peddapore ...	55,888	56,101	111,989	45	58	103	69	68	137	86	65	151	91	88	179	201	163	364	919	835	1,754			
36	206,886		Rajahmundry ...	105,045	101,840	206,885	69	75	144	80	76	156	105	104	209	161	126	287	242	162	404	1,164	929	2,093			
37	177,876		Amalapuram ...	89,768	88,108	177,876	23	32	55	34	38	72	30	31	61	52	41	93	73	57	130	887	796	1,683			
38	92,457		Narasipore ...	66,789	64,699	131,488	39	41	80	54	56	110	48	39	87	241	217	458	244	220	464	1,015	923	1,937			
39	187,491	Godavery.	Ellore ...	83,757	83,784	167,541	58	74	132	25	26	51	19	11	30	45	43	88	60	46	106	284	256	540			
40	145,715		Undi ...	72,866	72,849	145,715	46	57	103	68	66	134	66	57	123	297	286	583	264	230	494	1,332	1,001	2,333			
41	17,839		Tannuku ...	9,095	8,744	17,839	1	2	3	2	4	6	1	...	...	1	3	4	6	3	9	26	13	39			
42	19,788		M. T. Coconada ...	10,455	9,283	19,738	1	2	3	8	5	13	3	...	...	3	12	15	18	6	24	51	24	75			
43	25,497		M. T. Rajahmundry ...	13,788	11,699	25,487	3	4	7	...	...	...	3	...	...	9	9	18	12	9	21	40	39	79			
44	208,828		Zemindaries ...	102,374	101,454	203,828	57	72	129	81	67	148	97	85	182	115	133	248	166	182	348	1,062	989	2,051			

VIII.—(Continued.)

Deaths registered from *Fetters in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873.*

No.	Population according to Census of 1871.	Districts.	Names of Rural Circles and Towns.	Population for which Returns were received.			July.			August.			September.			October.			November.			December.			Total.			
				Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.				
33	106,452	Kistna.	Nundigama ...	54,184	52,268	106,452	22	20	42	32	23	55	19	17	36	29	18	47	227	196	423	177	147	324	680	565	1,245	
34	83,081		Bezawada ...	42,134	4,0917	83,081	14	14	28	19	21	40	23	23	46	32	21	53	141	97	238	122	74	196	631	377	908	
35	87,138		Gudiwada ...	43,473	43,665	87,138	15	13	28	11	17	28	12	20	32	19	12	26	43	24	67	30	20	50	263	165	372	
36	128,337		Masulipatam ...	65,479	62,858	128,337	16	11	27	20	13	33	19	13	32	19	23	42	46	39	85	43	33	76	297	202	465	
37	169,912		Repalli ...	86,268	83,644	169,912	24	28	52	19	22	41	40	21	61	20	19	39	47	26	73	46	36	82	330	290	640	
38	143,629		Bapatla ...	73,747	69,882	143,629	32	27	59	34	25	59	36	41	77	57	37	94	96	57	153	71	42	113	562	411	973	
39	120,619		Rajahpett ...	61,680	58,939	120,619	41	39	80	65	46	111	45	52	100	51	32	83	159	107	266	103	75	178	782	607	1,389	
40	64,508		Vennakondah ...	32,965	31,543	64,508	19	11	30	23	16	39	25	25	50	21	10	31	188	113	301	85	81	166	538	384	942	
41	120,658		Palnad ...	60,000	60,000	120,658	48	57	105	50	50	100	41	64	98	56	57	113	235	185	420	242	179	421	1,080	911	1,991	
42	101,728		Crosur ...	52,384	49,344	101,728	31	19	50	30	32	62	43	41	84	32	25	57	147	115	262	119	84	233	691	489	1,180	
43	108,964		Guntur ...	55,074	53,890	108,964	23	20	43	37	33	70	35	27	62	34	41	70	111	66	177	63	41	97	512	385	897	
44	18,083		M. T. Guntur ...	9,074	8,959	18,083	4	3	7	2	2	4	2	2	4	3	...	3	4	...	5	3	8	6	12	53	23	57
45	36,188		M. T. Masulipatam ...	17,268	18,920	36,188	8	5	13	5	9	14	6	4	10	2	7	9	9	...	5	3	8	6	12	53	50	103
46	163,127		Zemindaries ...	83,107	80,020	163,127	68	47	115	61	46	107	66	42	108	51	45	96	291	277	568	311	235	546	1,188	1,011	2,199	
	1,452,374		Total ...	737,495	714,879	1,452,374	365	314	679	408	355	763	418	382	800	416	347	763	1743	1305	3,048	1444	1059	2,503	7,501	5,870	13,371	
47	195,068	Nellore.	Ongole ...	98,680	96,388	195,068	56	34	90	50	46	96	49	47	96	43	62	105	101	90	194	79	55	134	669	574	1,243	
48	138,375		Kundakur ...	70,591	67,784	138,375	21	30	51	33	24	57	20	17	37	26	23	49	60	33	93	66	51	117	428	344	772	
49	81,336		Kavalli ...	42,011	39,325	81,336	20	19	39	20	19	39	17	16	32	28	25	53	45	21	66	42	36	78	299	236	535	
50	149,847		Nellore ...	75,329	74,518	149,847	28	11	39	31	27	58	33	16	49	25	46	101	73	71	171	81	61	112	486	377	863	
51	147,141		Gudur ...	76,637	70,504	147,141	25	31	56	32	32	64	30	39	69	25	34	59	36	31	64	39	42	81	410	397	807	
52	63,886		Raipur ...	33,131	30,754	63,886	18	17	35	17	18	35	20	27	47	19	26	45	24	16	40	20	19	39	253	227	480	
53	103,802		Atmakur ...	53,541	50,261	103,802	20	18	38	28	16	44	17	21	38	12	27	39	57	42	99	34	30	64	314	302	616	
54	100,985		Udayagiri ...	52,519	48,466	100,985	12	5	17	11	4	15	32	16	48	8	16	24	26	23	49	29	19	48	168	142	310	
55	127,258		Kanigiri ...	65,953	61,305	127,258	20	15	35	27	18	45	26	17	43	35	35	70	80	80	160	81	51	132	397	330	727	
56	29,922		M. T. Nellore ...	14,879	15,043	29,922	2	1	3	2	4	6	4	...	4	2	1	3	1	2	3	2	1	3	34	16	50	60
57	239,192		Zemindaries ...	124,121	115,071	239,192	136	108	244	139	132	271	149	136	285	151	130	281	345	271	616	325	278	603	2,058	1,818	3,876	
	1,376,811		Total ...	707,392	669,419	1,376,811	358	289	647	390	340	730	417	351	768	404	425	829	867	680	1,531	798	613	1,441	5,516	4,763	10,279	
58	397,552	Madras.	Madras Town ...	194,676	202,876	397,552	112	128	240	99	113	212	85	108	193	85	95	180	105	111	216	102	140	242	1,200	1,369	2,569	
59	104,210		Ponneri ...	53,204	51,006	104,210	23	25	48	22	25	47	25	39	64	28	25	53	30	29	59	39	38	77	307	335	642	
60	149,898		Trivellore ...	76,983	72,915	149,898	29	32	61	31	30	61	31	40	71	30	32	62	28	49	77	40	40	80	399	400	799	
61	186,404		Sydapet ...	98,657	92,647	186,404	45	49	94	47	35	82	42	42	84	44	47	91	73	61	137	54	64	108	520	523	1,043	
62	132,328		Chingleput ...	67,653	64,675	132,328	41	31	72	35	24	59	28	30	58	40	37	77	42	33	75	56	49	115	455	406	861	

63	197,308	100,453	96,855	197,308	62	47	109	50	56	106	42	38	80	57	45	102	51	70	121	86	83	169	619	618	1,235
64	130,709	65,566	65,143	130,709	42	26	67	19	32	61	27	30	57	44	38	82	38	44	82	37	31	68	421	386	787
65	37,327	18,262	19,076	37,327	9	12	21	8	7	15	8	11	19	6	9	15	11	10	21	14	10	24	84	97	181
	988,184	476,968	462,216	988,184	251	221	472	212	209	421	208	230	438	249	233	485	278	289	572	326	315	641	2,805	2,743	5,548
66	239,754	122,412	117,348	239,754	48	41	89	25	34	59	52	51	108	87	88	75	60	56	116	71	56	127	549	498	1,048
67	164,687	83,571	81,086	164,687	88	64	152	56	55	111	66	59	125	43	34	77	63	39	102	81	42	128	1,018	855	1,868
68	236,108	120,178	116,980	236,108	62	47	109	56	61	136	58	40	98	71	62	123	84	56	140	77	86	163	721	619	1,840
69	244,559	123,269	121,290	244,559	66	64	130	62	74	137	60	65	145	79	84	168	69	78	147	81	76	157	840	796	1,638
70	289,183	118,520	120,613	289,183	44	48	92	30	42	72	43	48	91	48	48	96	53	51	104	50	52	102	508	502	1,008
71	178,504	99,495	89,009	178,504	50	53	108	61	54	115	71	69	140	64	63	113	87	95	189	82	51	188	775	672	1,447
72	196,566	98,378	97,193	196,566	66	50	116	65	45	110	51	55	106	68	50	113	69	70	189	68	57	125	720	630	1,360
73	216,246	109,599	106,647	216,246	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
74	40,280	19,606	20,785	40,280	6	4	10	3	4	7	4	2	6	10	5	15	6	7	13	7	4	11	64	64	128
	1,765,817	885,922	869,895	1,765,817	507	446	953	414	432	846	506	486	942	489	422	911	573	524	1,097	613	494	1,107	6,064	5,840	11,394
75	237,893	119,998	117,895	237,893	58	56	114	57	63	120	89	95	184	97	75	172	72	79	151	80	73	153	868	841	1,704
76	218,660	...	...	218,660	75	73	148	66	70	136	64	60	114	56	64	120	67	75	142	78	102	180	719	776	1,495
77	228,813	113,233	115,080	228,813	35	38	68	40	32	72	44	32	76	35	37	72	63	37	90	64	68	127	468	442	910
78	257,174	123,875	133,299	257,174	73	71	144	75	59	134	67	73	140	75	68	143	73	100	178	115	119	284	878	840	1,718
79	170,567	88,837	86,730	170,567	62	56	118	51	47	98	56	63	119	57	60	117	86	77	168	88	68	151	704	687	1,391
80	76,530	36,938	39,597	76,530	11	8	19	9	15	24	9	14	23	10	10	20	12	13	25	19	11	30	129	137	266
81	11,271	...	...	11,271	2	1	3	...	4	4	1	3	4	1	2	3	3	1	4	3	4	7	24	25	49
	1,200,408	588,184	612,274	1,200,408	373	350	723	360	369	729	371	389	759	385	356	741	437	439	876	514	524	1,088	4,528	4,460	8,988
82	107,459	52,720	54,789	107,459	14	19	33	9	12	21	9	11	20	6	7	13	12	4	16	9	11	20	124	124	248
83	198,193	96,110	102,063	198,193	15	32	47	30	19	49	12	18	30	12	14	26	28	19	42	19	28	47	247	255	502
84	207,407	98,551	108,856	207,407	16	16	32	13	11	24	13	20	33	16	10	26	16	20	36	11	24	35	148	161	309
85	152,208	72,879	79,829	152,208	8	13	21	20	21	41	17	26	43	22	25	47	20	22	42	26	20	46	218	233	446
86	154,714	76,177	79,537	154,714	15	18	33	13	9	22	15	19	34	13	19	32	13	19	32	25	31	56	184	209	393
87	237,423	115,777	121,646	237,423	13	20	33	19	16	35	20	18	38	7	12	19	20	19	39	19	14	33	212	184	396
88	292,164	141,444	150,720	292,164	52	57	109	60	48	108	59	54	113	54	54	108	69	68	187	87	68	155	683	610	1,238
89	295,580	144,020	152,570	295,580	46	43	89	41	65	108	51	45	97	46	60	106	53	68	119	57	59	116	555	609	1,164
90	143,561	69,314	74,247	143,561	19	15	34	14	12	26	11	16	27	12	13	25	10	11	21	18	13	31	151	141	292
91	52,175	25,796	26,449	52,175	9	6	15	6	11	17	10	12	22	6	6	12	16	17	33	21	19	40	137	130	267
92	44,444	21,569	22,875	44,444	4	6	10	9	9	18	8	11	19	9	7	16	11	12	23	25	16	41	92	92	184
93	21,165	10,407	10,758	21,165	6	4	10	3	1	4	1	1	2	1	3	4	2	3	5	6	2	8	88	81	69
94	48,525	21,250	27,275	48,525	8	4	12	8	8	16	6	8	14	7	5	12	8	3	11	6	7	13	88	85	168
95	17,703	8,524	9,179	17,703	2	...	2	2	...	2	...	4	4	2	2	4	4	2	6	2	4	6	16	20	36
	1,973,731	953,968	1,019,763	1,973,731	227	253	490	247	242	489	232	264	496	213	237	450	277	285	562	331	316	647	2,383	2,364	5,767
96	811,601	153,199	158,902	811,601	56	66	123	85	64	149	106	92	198	68	72	140	70	80	180	93	96	189	898	856	1,754
97	128,968	63,332	65,651	128,968	19	21	40	18	17	35	12	7	19	10	18	23	13	13	31	9	12	21	148	156	304
98	179,431	88,386	91,105	179,431	23	26	40	33	33	66	43	26	69	43	42	85	58	52	105	73	85	153	450	410	860
99	241,215	120,724	120,945	241,215	51	89	80	43	44	87	47	34	77	37	56	98	60	60	119	77	69	146	614	608	1,250
100	217,418	107,073	110,345	217,418	64	70	134	48	64	112	47	51	96	71	52	130	66	76	142	76	79	155	692	721	1,418
101	184,331	91,077	98,754	184,331	43	30	73	25	26	51	28	35	63	34	28	62	38	32	70	50	46	96	447	365	812

1134	128,163	61,866	128,162	50	39	1,127	616	590	1,206	630	577	1,207	704	628	1,327	774	651	1,426	756	684	1,419	7,384	6,449	18,838
1135	136,468	66,366	136,468	28	24	52	34	24	58	41	36	77	29	43	72	27	25	52	12	16	28	299	805	604
1136	140,948	68,102	140,948	32	44	76	36	38	78	24	25	49	38	35	73	31	33	64	18	16	34	351	352	703
1137	110,405	66,356	110,405	62	71	133	73	73	147	67	63	140	69	80	149	77	79	176	96	92	42	220	190	410
1138	109,965	57,264	110,405	53	40	93	53	45	98	73	50	123	89	73	182	87	64	151	56	63	41	347	323	670
1139	146,788	56,444	109,965	50	63	103	62	46	108	45	29	74	64	48	112	65	50	116	71	43	119	578	499	1,077
1140	16,275	7,946	16,275	13	9	22	10	10	20	14	15	29	12	11	23	20	14	34	18	7	20	198	161	354
Total ...	1,351,194	667,794	1,351,194	590	547	1,127	616	590	1,206	630	577	1,207	704	628	1,327	774	651	1,426	756	684	1,419	7,384	6,449	18,838
Bellary	66,704	68,774	130,478	28	24	52	34	24	58	41	36	77	29	43	72	27	25	52	12	16	28	299	805	604
Adoni	81,690	77,170	158,860	32	44	76	36	38	78	24	25	49	38	35	73	31	33	64	18	16	34	351	352	703
Alur	51,052	47,178	98,230	21	16	37	15	13	28	13	20	33	24	24	44	12	19	31	26	16	42	220	190	410
Ghoaty	71,693	66,145	137,838	28	20	48	39	36	75	36	50	86	31	29	60	27	17	44	17	24	41	347	323	670
Tadpatri	59,945	57,266	117,211	8	2	10	15	8	23	6	8	14	8	15	23	7	15	22	8	4	12	86	86	172
Anantapore	51,095	46,748	97,843	20	16	35	15	18	33	15	12	27	13	13	32	6	24	32	26	24	60	199	167	366
Hospeti	47,605	45,819	93,424	49	39	88	54	43	97	46	44	90	60	44	104	54	53	107	68	54	120	738	693	1,426
Dharmavaram	63,098	57,513	120,608	59	53	111	47	47	94	52	43	100	56	66	120	36	22	53	89	86	175	561	539	1,100
Pennakondah	46,182	42,572	88,754	28	32	60	24	30	54	38	37	76	35	26	61	28	36	64	32	26	68	849	302	651
Hindupur	45,200	42,695	87,895	31	40	71	24	26	50	40	42	82	32	27	59	43	51	94	41	50	91	384	413	797
Madakewara	40,888	38,620	79,488	...	...	...	...	...	...	7	5	12	7	9	16	7	12	19	7	5	12	41	48	89
Royadroog	45,938	41,841	87,779	44	46	90	45	39	84	52	66	117	63	52	105	43	46	89	66	53	108	460	465	926
Kudlighi	47,351	45,877	93,228	38	24	62	23	23	46	27	21	43	30	81	65	23	28	50	26	17	43	328	282	610
Hurpunnully	48,947	41,782	85,729	2	...	2	8	11	19	11	14	25	11	16	27	8	5	13	10	13	23	88	90	178
Huvnehbadgally	44,536	44,002	89,538	4	...	4	8	4	7	6	4	10	5	3	8	5	4	9	5	6	10	91	94	185
M. T. Bellary	27,185	24,581	51,766	10	17	27	7	18	25	6	11	17	5	11	16	9	18	27	11	15	26	92	139	231
M. T. Adoni	11,600	11,128	22,728	11	13	24	16	16	32	11	21	32	6	22	28	6	17	23	6	11	17	113	150	283
M. T. Ghooty	8,186	6,780	14,966	1	3	...	1	5	7	...	...	2	2	1	4	5	2	...	...	...	...	...	...	...
M. T. Anantapore	2,438	4,918	7,354	...	7	...	...	...	...	1	2	2	...	...	...	...	...	...	...	...	...	...	...	...
Zemindaries ...	860,178	807,893	1,668,006	421	401	822	415	404	819	436	472	909	452	435	937	395	424	819	465	452	918	4,866	9,669	24,093
Chendraghiri	51,042	48,586	99,628	30	39	69	35	26	61	31	16	47	23	20	43	27	19	43	39	29	68	363	319	632
Wallajahpatt	103,172	100,929	204,101	51	48	99	48	39	87	46	50	96	64	69	133	54	81	135	87	67	154	719	707	1,436
Wandewash	77,197	76,310	153,507	28	27	55	27	31	53	31	22	53	20	32	52	31	34	65	52	36	86	377	372	749
Aroot	78,564	76,827	157,391	34	27	61	31	26	61	31	22	70	37	38	75	57	64	101	87	38	75	439	415	854
Vellore	141,134	139,134	280,268	139	134	273	119	100	219	102	101	203	103	76	179	87	58	145	80	77	157	1,948	1,874	3,822
Polar	54,820	54,390	109,150	63	61	124	53	45	96	55	47	102	63	22	85	43	38	81	49	35	84	960	945	1,905
Gudlathum	82,466	80,514	162,980	126	125	251	110	94	204	106	121	226	180	111	241	133	106	239	170	139	309	1,787	1,698	3,435
Palmanair	30,702	29,509	60,211	50	41	91	41	49	90	34	31	65	38	31	69	35	32	67	48	42	90	462	450	912
Chittoor	109,588	103,457	213,045	55	66	121	64	64	128	67	43	115	66	43	99	70	63	132	70	68	138	817	693	1,510
M. T. Vellore	18,139	19,883	38,025	17	22	39	15	17	32	22	11	33	13	7	20	13	18	26	23	19	42	207	184	391
M. T. Wallajahpatt.	6,272	12,108	18,380	1	2	8	...	...	...	1	1	2	...	...	...	...	...	...	...	...	...	...	...	...
Zemindaries ...	388,307	325,699	664,006	268	239	497	224	277	501	212	199	411	255	251	506	285	268	553	316	284	600	3,273	3,109	6,893
Total ...	1,090,678	994,600	2,015,278	862	821	1,638	767	768	1,535	742	681	1,428	807	700	1,507	842	752	1,594	977	835	1,812	11,316	10,778	22,093
Kistnacherry	85,032	85,201	170,233	87	64	151	67	73	140	90	101	191	69	54	123	84	68	152	101	82	183	988	904	1,892
Triptacoor	96,812	96,983	190,800	162	144	306	134	127	261	105	125	230	125	113	238	161	106	267	167	116	273	2,062	2,021	4,083
Uttengherry	75,986	77,815	153,801	69	69	138	90	83	173	109	107	216	112	136	247	113	111	234	131	116	247	1,142	1,095	2,237
Athoor	80,350	83,750	164,006	79	86	165	71	67	183	78	104	182	79	71	150	103	94	193	113	133	243	1,017	1,003	2,020
173	170,233	85,201	170,233	87	64	151	67	73	140	90	101	191	69	54	123	84	68	152	101	82	183	988	904	1,892
174	190,800	96,983	190,800	162	144	306	134	127	261	105	125	230	125	113	238	161	106	267	167	116	273	2,062	2,021	4,083
175	153,801	77,815	153,801	69	69	138	90	83	173	109	107	216	112	136	247	113	111	234	131	116	247	1,142	1,095	2,237
176	164,006	83,750	164,006	79	86	165	71	67	183	78	104	182	79	71	150	103	94	193	113	133	243	1,017	1,003	2,020

VIII.—(Continued.)
Deaths registered from Fevers in the Rural Circles and Towns of the Madras Presidency during each Month of the Year 1873.

No.	Population according to Census of 1871.	District.	Names of Rural Circles and Towns.	Population for which Returns were received.		July.		August.		September.		October.		November.		December.		Total.											
				Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.								
177	261,009	Salern.-(Ctd.)	Namacal	127,880	133,129	261,009	100	102	202	89	79	168	114	124	238	101	83	184	125	111	236	121	122	243	1,834	1,859	3,693		
178	343,793		Salem	170,018	173,775	343,793	168	141	309	167	150	317	173	154	327	162	145	307	221	191	412	212	196	408	1,994	1,729	3,723		
179	249,678		Trichengode	125,220	124,458	249,678	106	109	215	122	138	260	133	151	284	114	119	233	139	148	287	152	134	286	1,524	1,459	2,983		
180	190,626		Dharmpoor	95,080	95,546	190,626	100	67	167	129	97	226	104	95	199	98	70	168	148	109	257	140	115	255	1,328	1,061	2,389		
181	193,037		Oosoor	97,276	95,761	193,037	76	58	134	75	80	155	80	94	174	85	101	186	106	107	213	124	112	236	1,023	968	1,991		
182	50,012		M. T. Salem	24,942	25,070	50,012	11	15	26	20	10	30	14	5	19	7	14	21	6	12	18	6	10	16	115	128	243		
	1,966,995		Total	975,502	991,493	1,966,995	958	865	1,813	964	904	1,868	1000	1060	2,060	952	905	1,857	1,205	1057	2,262	1,257	1,136	2,393	13,027	12,227	25,254		
183	169,916	Coimbatore.	Suthiamungalum	84,321	85,595	169,916	55	59	114	75	86	161	66	47	113	68	72	140	57	64	121	111	75	186	777	663	1,440		
184	90,830		Collegal	48,157	42,673	90,830	28	34	62	34	28	62	37	38	75	33	28	61	37	34	71	50	45	95	435	380	815		
185	102,813		Bhowany	51,235	51,578	102,813	43	31	74	49	47	96	38	38	76	46	45	91	43	27	70	53	45	98	494	429	923		
186	223,363		Perindorai	...	...	223,363	53	61	114	62	46	108	78	70	148	59	40	99	64	49	113	58	62	120	736	569	1,304		
187	175,659		Caroor	86,200	89,459	175,659	32	33	65	31	22	53	36	40	76	39	35	74	41	32	73	52	55	107	875	416	1,291		
188	217,493		Dharmpooram	107,881	109,612	217,493	14	23	37	17	22	39	51	36	87	39	23	62	38	25	63	33	40	73	395	347	742		
189	123,650		Oodamalappettah	60,462	63,188	123,650	22	13	35	20	18	38	18	20	38	23	13	36	36	24	60	49	28	77	300	208	508		
190	167,546		Pollachy	82,604	84,942	167,546	69	62	131	56	52	108	63	43	106	63	67	130	63	44	107	79	64	143	781	615	1,346		
191	208,685		Coimbatore	102,544	106,141	208,685	48	35	83	53	29	82	57	62	119	51	35	86	45	31	76	49	29	78	577	413	990		
192	237,808		Palladom	117,194	120,614	237,808	59	41	100	50	50	100	69	32	92	63	31	97	47	48	95	73	50	123	681	553	1,234		
193	35,310		M. T. Coimbatore	17,096	18,214	35,310	5	6	10	3	4	7	2	4	6	4	5	9	3	5	1	2	3	5	1	6	31	43	74
194	10,201		M. T. Erode	...	...	10,201	3	2	5	1	...	1	...	1	1	1	1	6	7	1	1	2	3	...	3	22	21	43	
	1,763,274		Total	874,975	888,299	1,763,274	431	399	830	451	404	855	506	431	937	489	403	892	473	381	854	615	494	1,109	5,637	4,657	10,294		
195	36,461	Neilgherries.	Neilgherries	20,269	16,192	36,461	20	14	34	21	8	29	22	9	31	10	17	27	19	11	30	11	8	19	194	126	320		
196	9,982		M. T. Ootacamund	5,265	4,717	9,982	2	2	4	1	1	2	2	3	5	1	2	3	4	1	5	4	1	5	35	37	72	14	
197	3,058		M. T. Coonoor	1,658	1,400	3,058	1	2	3	...	...	...	1	...	1	1	1	...	1	1	1	2	...	...	...	6	8	14	
	49,501		Total	27,192	22,309	49,501	23	18	41	22	9	31	25	12	37	12	19	31	24	13	37	15	9	24	235	171	406		
198	113,713	South Canara.	Kandapoor	55,878	57,835	113,713	27	25	52	28	21	49	27	27	54	29	29	58	30	23	53	23	24	47	295	272	567		
199	231,570		Udupi	114,329	117,241	231,570	21	9	30	23	15	38	18	10	28	16	18	34	17	10	27	25	15	40	220	167	387		
200	213,067		Mangalore	107,022	106,045	213,067	52	63	115	42	42	84	43	23	60	41	33	74	38	40	78	35	44	79	487	449	936		
201	107,722		Uppanangadi	55,635	52,087	107,722	59	66	125	35	51	86	23	43	66	25	27	52	22	31	53	25	24	49	443	494	937		
202	222,578		Kassergode	111,687	110,891	222,578	77	63	140	48	31	79	42	39	81	41	30	71	52	28	80	39	29	68	502	407	909		
203	29,712		M. T. Mangalore	15,188	14,524	29,712	4	5	9	9	7	16	2	4	6	5	6	11	5	4	9	4	4	8	45	43	88		
	918,362		Total	459,729	458,633	918,362	240	231	471	185	167	352	145	150	295	157	143	300	164	136	300	151	140	291	1,992	1,882	3,874		

204	243,118	Cheriod	122,190	125,923	243,118	69	62	131	39	43	82	34	35	72	37	32	69	34	33	67	39	45	84	569	520	1,083
205	123,057	Kottiyam	60,749	62,308	123,057	41	35	76	42	29	71	28	18	46	15	18	33	17	17	34	25	27	52	403	350	753
206	135,938	Wynad	76,228	49,710	135,938	53	31	83	45	32	77	36	19	55	43	27	70	45	24	69	44	17	61	546	349	895
207	243,751	Kannur	121,550	122,191	243,751	48	45	93	55	43	98	57	38	95	37	37	74	41	35	76	55	39	94	651	536	1,187
208	141,806	Calicut	70,126	71,680	141,806	62	56	118	45	28	73	41	28	69	29	28	55	28	20	45	44	26	70	524	420	944
209	237,936	Ernad	145,465	142,471	237,936	120	110	230	101	66	167	60	68	128	67	42	109	66	55	121	81	57	138	1,105	853	1,958
210	292,482	Valarad	144,798	147,686	292,482	88	80	168	87	63	150	71	53	129	65	54	119	70	53	123	91	57	148	1,082	903	1,985
211	5,986	Cochin	3,143	2,844	5,986	...	...	...	96	59	...	60	47	...	...	1	1	...	...	...	...	...	...	...	2	2
212	295,103	Palghat	144,151	150,952	295,103	83	78	156	96	41	164	60	47	107	64	50	114	77	65	142	91	70	161	962	766	1,728
213	374,756	Ponani	185,306	189,450	374,756	57	35	92	41	84	75	30	25	55	24	25	49	27	30	57	39	25	64	433	406	889
214	...	Anjengo	...	...	...	...	...	...	2	1	3	1	1	2	...	...	...	...	...	...	...	...	...	4	3	7
215	...	Tangacherry	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
216	30,504	M. T. Tellicherry	9,847	10,657	30,504	5	1	6	4	5	9	4	5	9	...	4	4	2	...	2	4	5	9	42	37	79
217	47,962	M. T. Calicut	24,064	23,898	47,962	3	...	3	3	2	5	2	...	2	4	3	7	5	4	9	2	...	2	36	16	52
218	30,752	M. T. Palghat	15,074	15,678	30,752	9	12	21	7	8	15	3	3	6	2	7	9	9	9	18	9	6	15	81	95	176
219	13,840	M. T. Cochin	6,985	6,355	13,840	...	...	...	...	...	...	7	3	10	1	...	1	3	1	4	...	...	...	26	14	40
220	9,259	M. T. Cannanore	5,206	4,053	9,259	5	5	10	4	7	11	10	9	19	3	7	10	4	6	10	8	4	12	55	52	107
2,261,250		Total ...	1,134,889	1,126,361	2,261,250	642	545	1,187	571	419	990	444	380	804	391	333	724	428	353	786	532	378	910	6,569	5,323	11,892
30,835,577		Total Madras Presidency	15,221,097	15,066,763	30,287,842	8800	8140	16,940	8865	5241	17,106	9068	8536	17,624	8979	8255	17,234	12,393	10,690	22,983	13,179	11,255	24,434	117,387	105,456	232,843

IX.

Deaths registered from Boucel-complaints in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873.

No.	Population according to Census of 1871.	Names of Districts.	Population for which Returns were received.		January.		February.		March.		April.		May.		June.	
			Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.
1	1,388,976	Ganjam District	631,013	571,180	1,202,193	19	14	33	23	8	31	21	18	39	15	20
2	533,843	{ Taluqs (R. C.)	265,508	268,335	533,843	11	6	17	13	8	21	11	13	24	9	12
3	37,237	Total ... { Municipal Towns.	18,074	19,183	37,257	...	1	1	...	...	...	3	...	...	...	...
4	817,876	{ Zemindaries	347,431	283,662	631,093	8	7	15	10	...	10	7	5	12	6	8
5	1,844,711	Vizagapatam District	780,149	748,818	1,528,967	23	11	34	13	19	32	13	14	27	20	32
6	1,577,819	{ Taluqs (R. C.)	394,651	377,467	772,118	14	4	18	6	10	16	7	7	13	8	12
7	63,064	Total ... { Municipal Towns.	34,370	35,516	69,916	3	1	4	6	1	7	5	5	10	5	11
8	203,828	{ Zemindaries	351,125	335,805	686,930	6	6	12	1	8	9	1	2	7	7	9
9	1,592,939	Godavary District	803,603	789,336	1,592,939	31	28	59	26	15	41	34	30	64	32	58
10	1,326,047	{ Taluqs (R. C.)	667,891	658,156	1,326,047	24	25	49	23	10	33	29	23	52	26	41
11	63,064	Total ... { Municipal Towns.	33,338	29,726	63,064	3	2	5	3	2	5	2	3	7	5	9
12	203,828	{ Zemindaries	102,374	101,454	203,828	4	1	5	...	3	3	4	4	7	1	8
13	1,452,374	Kistna District	737,495	714,879	1,452,374	29	22	51	29	18	47	24	24	71	19	38
14	1,235,026	{ Taluqs (R. C.)	628,046	606,980	1,235,026	25	19	44	24	16	40	19	20	39	16	34
15	54,221	Total ... { Municipal Towns.	26,342	27,879	54,221	2	2	4	2	1	3	2	...	...	...	...
16	163,127	{ Zemindaries	83,107	80,020	163,127	2	1	3	3	1	4	3	4	7	3	4
17	1,376,811	Nellore District	707,392	669,419	1,376,811	50	22	72	22	15	37	34	29	63	24	50
18	11,07,697	{ Taluqs (R. C.)	568,392	539,305	1,107,697	27	6	33	13	5	18	18	13	31	19	34
19	29,922	Total ... { Municipal Towns.	14,879	15,043	29,922	1	...	1	1	...	1	1	1	2	...	...
20	239,192	{ Zemindaries	124,121	115,071	239,192	22	16	38	8	10	18	15	9	24	9	16
21	397,552	Madras Town (R. C.)	194,676	202,876	397,552	106	91	197	78	84	162	92	84	176	141	165
22	938,184	Chingleput District	475,988	462,216	938,184	95	74	169	63	62	125	77	62	139	63	125
23	900,857	{ Taluqs (R. C.)	457,716	443,141	900,857	93	73	166	62	61	123	72	57	133	52	104
24	37,327	Total ... { Municipal Towns.	18,252	19,075	37,327	2	1	3	1	1	2	5	1	6	11	21
25	1,755,817	South Arcot District	885,922	869,895	1,755,817	52	37	89	45	47	92	63	44	115	51	98
26	1,715,527	{ Taluqs (R. C.)	866,417	849,110	1,715,527	52	32	84	42	43	85	57	36	103	48	90
27	40,290	Total ... { Municipal Towns.	19,505	20,785	40,290	...	5	5	3	4	7	6	8	12	3	8
28	1,200,408	Trichinopoly District	588,134	612,274	1,200,408	51	47	98	51	29	80	63	63	113	61	106
29	1,112,607	{ Taluqs (R. C.)	...	...	1,112,607	41	38	79	42	18	60	58	54	97	50	85
30	87,801	Total ... { Municipal Towns.	...	...	87,801	10	9	19	9	11	20	5	9	16	11	21
31	1,978,731	Tanjore District	953,968	1,019,763	1,978,731	108	93	201	68	50	118	72	58	133	96	162
32	1,789,719	{ Taluqs (R. C.)	866,492	923,227	1,789,719	74	61	135	51	38	89	56	37	97	66	103
33	184,012	Total ... { Municipal Towns.	87,476	96,536	184,012	34	32	66	17	12	29	16	21	36	30	69

34	2,566,615	Madras District	1,112,088	1,154,549	2,266,615	155	116	271	184	129	267	120	92	212	85	89	165	96	80	176	91	73	168
35	1,263,379	{ Taluqs (R. C.) ...	623,781	623,781	1,263,379	62	88	100	47	87	104	47	36	85	80	43	78	46	43	89	49	40	88
36	64,962	{ Municipal Towns ...	32,764	32,764	64,962	7	5	12	6	8	14	5	4	9	10	2	12	6	6	13	7	3	10
37	938,384	{ Zemindaries ...	455,571	482,813	938,384	86	73	159	81	58	139	68	50	118	45	35	80	44	31	75	35	29	64
38	1,698,969	Tinnevely District...	836,515	857,444	1,698,969	361	244	725	298	229	527	209	228	437	197	191	398	192	152	344	159	129	238
39	1,644,405	{ Taluqs (R. C.) ...	811,896	832,568	1,644,405	349	307	656	268	208	469	181	201	382	177	170	847	176	131	809	146	116	232
40	49,554	{ Municipal Towns ...	24,679	24,875	49,554	32	37	69	32	26	58	28	27	55	20	21	41	14	21	35	13	13	26
41	959,640	Kurnool District	467,640	448,792	914,432	18	16	29	30	9	29	20	15	25	15	17	82	27	13	40	26	20	49
42	881,558	{ Taluqs (R. C.) ...	451,488	430,070	881,558	10	7	17	13	6	19	13	10	23	9	8	17	17	6	23	18	8	21
43	82,374	{ Municipal Towns ...	16,152	16,722	82,374	3	9	13	7	3	10	7	5	12	6	9	15	10	7	17	13	12	25
44	45,208	{ Zemindaries ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
45	1,351,194	Cuddapah District...	693,400	667,794	1,351,194	87	26	63	22	23	45	31	14	45	21	16	87	30	20	50	31	25	56
46	1,334,919	{ Taluqs (R. C.) ...	685,071	649,948	1,334,919	37	26	63	21	22	43	31	14	45	21	16	87	30	18	48	31	25	56
47	16,275	{ Municipal Towns ...	8,398	7,946	16,275	...	...	...	...	1	2	...	...	...	...	...	...	...	2	...	...	...	...
48	1,663,006	Bellary District	890,178	807,838	1,663,006	103	...	...	79	55	134	80	69	149	78	68	145	94	104	198	95	72	167
49	1,566,873	{ Taluqs (R. C.) ...	807,871	759,002	1,566,873	99	85	164	76	49	125	72	66	138	73	66	139	90	93	133	93	70	163
50	86,137	{ Municipal Towns ...	44,768	41,368	86,137	3	2	5	2	5	7	8	2	10	5	1	6	3	11	14	2	2	4
51	14,986	{ Zemindaries ...	7,594	7,462	14,986	1	1	2	1	1	2	...	...	1	...	1	1	1	...	...	...	...	...
52	2,015,278	North Arcot District	1,020,678	994,600	2,015,278	115	118	233	77	64	141	65	82	147	76	70	145	68	55	123	53	81	134
53	1,801,147	{ Taluqs (R. C.) ...	698,401	642,745	1,801,147	90	79	169	63	36	88	60	60	110	54	43	97	51	31	82	84	47	81
54	50,125	{ Municipal Towns ...	23,970	26,155	50,125	2	...	2	1	1	2	1	1	2	2	1	3	...	...	...	1	3	4
55	664,006	{ Zemindaries ...	338,370	336,699	664,006	23	39	63	24	27	51	14	21	35	20	26	45	17	24	41	18	31	49
56	1,966,995	Salem District	975,502	991,498	1,966,995	82	70	152	57	78	135	85	72	157	63	61	124	95	59	154	79	66	145
57	1,916,983	{ Taluqs (R. C.) ...	950,580	946,423	1,916,983	79	63	147	55	75	130	84	70	154	60	56	116	93	53	151	76	65	141
58	50,012	{ Municipal Towns ...	24,942	25,070	50,012	3	2	5	2	3	5	1	2	3	3	5	5	2	1	3	3	1	4
59	1,763,274	Coimbatore District	874,975	888,399	1,763,274	117	106	223	94	74	168	88	73	155	92	96	172	97	67	164	126	93	219
60	1,717,768	{ Taluqs (R. C.) ...	...	...	1,717,768	114	105	219	94	74	168	88	73	155	92	92	168	94	66	160	123	90	218
61	45,511	{ Municipal Towns ...	...	...	45,511	3	1	4	...	...	...	5	1	6	3	1	4	3	1	4	3	3	6
62	49,501	Neigherry District...	27,192	22,309	49,501	3	4	7	5	4	9	2	...	2	4	3	7	8	6	14	5	8	13
63	36,451	{ Taluqs (R. C.) ...	20,269	16,192	36,451	1	2	3	3	2	5	2	...	2	2	1	3	6	2	8	3	2	5
64	13,040	{ Municipal Towns ...	6,923	6,117	13,040	2	2	4	2	2	4	...	...	...	2	2	4	3	4	6	2	6	8
65	918,352	South Canara	459,729	458,683	918,352	154	150	304	125	88	213	94	75	169	94	80	174	84	67	151	87	77	164
66	888,860	{ Taluqs (R. C.) ...	444,541	444,109	888,860	149	145	294	124	87	211	89	70	169	89	76	165	81	61	143	88	73	168
67	29,712	{ Municipal Towns ...	15,188	14,524	29,712	5	5	...	1	1	2	5	6	10	5	4	9	3	6	9	4	4	8
68	2,261,250	Malabar District	1,134,889	1,126,361	2,261,250	147	133	280	128	134	262	105	89	194	126	94	220	120	91	211	152	130	232
69	2,138,938	{ Taluqs (R. C.) ...	1,078,713	1,065,220	2,138,938	145	129	274	122	130	252	101	88	189	115	83	203	117	85	202	144	118	262
70	122,317	{ Municipal Towns ...	61,176	61,141	122,317	2	4	6	6	4	10	4	1	5	11	6	17	3	6	9	8	12	20
30,835,577	Total Madras Presidency ...		15,231,079	15,066,769	30,297,842	1,371	1,610	3,481	1,457	1,328	2,685	1,392	1,200	2,592	1,447	1,137	2,584	1,372	1,132	2,504	1,150	2,531	

IX.—(Continued.)
Deaths registered from Bowel-Complaints in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873.

No.	Population according to Census of 1871.	Names of Rural Circles and Towns.	Population for which Returns were received.			July.			August.			September.			October.			November.			December.			Total.		
			Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
1	1,388,976	Ganjam District	631,013	571,180	1,202,193	14	9	23	19	12	31	19	9	28	17	8	25	16	5	21	351	127	478			
2	533,843	{ Taluqs (R. C.)	265,508	268,335	533,843	4	8	12	11	8	19	14	8	22	10	5	15	4	3	7	130	83	213			
3	37,257	{ Municipal Towns.	18,074	19,183	37,257	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	817,876	Total ... { Zemindaries	347,431	283,682	631,093	10	1	11	8	4	12	5	1	6	7	2	9	9	2	11	213	39	252			
5	1,844,711	Vizagapatam District	780,149	748,818	1,528,967	22	17	39	16	8	24	19	10	29	30	15	45	12	19	31	226	155	381			
6	1,577,819	{ Taluqs (R. C.)	394,654	377,467	772,121	9	4	13	5	3	8	3	3	6	11	8	19	5	6	11	88	65	153			
7	63,064	{ Municipal Towns.	34,370	35,546	69,916	8	8	16	7	2	9	7	2	9	5	6	11	1	7	8	62	48	110			
8	23,828	Total ... { Zemindaries	351,125	335,805	686,930	5	5	10	4	3	7	9	5	5	14	14	15	6	6	12	76	42	118			
9	1,592,939	Godavery District	803,603	789,336	1,592,939	60	42	102	73	55	128	60	54	114	43	46	89	42	46	88	501	489	940			
10	1,326,047	{ Taluqs (R. C.)	667,891	658,156	1,326,047	48	40	88	61	47	108	53	43	96	31	36	67	39	42	81	375	365	783			
11	63,264	{ Municipal Towns.	33,338	29,726	63,064	6	2	8	8	8	16	4	5	9	11	7	18	2	2	4	46	42	88			
12	203,828	Total ... { Zemindaries	102,374	201,454	203,828	6	...	6	4	...	4	3	6	9	1	3	4	1	2	3	37	32	69			
13	1,452,374	Kistna District	737,495	714,879	1,452,374	26	16	42	30	22	52	28	22	50	29	23	52	22	24	46	294	238	532			
14	1,235,026	{ Taluqs (R. C.)	628,046	606,980	1,235,026	23	16	39	23	17	40	23	18	41	21	18	39	19	22	41	251	201	442			
15	54,221	{ Municipal Towns.	26,342	27,879	54,221	1	...	1	2	4	6	1	2	3	5	3	8	2	1	3	19	15	34			
16	163,127	Total ... { Zemindaries	83,107	80,020	163,127	2	...	2	5	1	6	4	2	6	3	2	5	1	1	2	34	22	56			
17	1,376,811	Nellore District	707,392	669,419	1,376,811	23	29	52	18	28	46	30	26	56	29	20	49	39	31	70	368	307	675			
18	1,107,697	{ Taluqs (R. C.)	568,392	539,305	1,107,697	16	19	35	8	21	29	18	19	37	18	13	31	21	22	43	201	191	392			
19	29,922	{ Municipal Towns.	14,879	15,043	29,922	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
20	239,192	Total ... { Zemindaries	124,121	115,071	239,192	7	10	17	10	7	17	12	7	19	11	7	18	17	9	26	160	114	274			
21	397,552	Madras Town (R. C.)	194,676	202,876	397,552	71	89	160	96	103	199	95	81	176	90	93	183	116	99	215	1,104	1,066	2,170			
22	938,184	Chingleput District	475,968	462,216	938,184	64	75	139	70	65	135	49	59	108	79	69	148	87	79	166	901	792	1,693			
23	900,857	{ Taluqs (R. C.)	457,716	443,141	900,857	50	66	116	61	52	113	39	53	92	67	56	123	73	63	136	779	700	1,479			
24	37,327	Total ... { Municipal Towns.	18,252	19,075	37,327	14	9	23	9	13	22	10	6	16	12	13	25	14	16	30	17	4	21	122	214	
25	1,755,817	South Arcot District	885,922	869,895	1,755,817	48	39	87	41	47	88	61	36	97	64	44	108	97	59	156	741	562	1,303			
26	1,715,827	{ Taluqs (R. C.)	866,417	849,110	1,715,827	47	37	84	38	45	83	57	30	87	61	41	102	94	56	150	701	609	1,210			
27	40,290	Total ... { Municipal Towns.	19,505	20,785	40,290	1	2	3	3	2	5	4	6	6	10	3	6	6	3	6	40	53	93			
28	1,200,408	Trichinopoly District	588,134	612,274	1,200,408	78	67	145	68	55	123	86	69	155	89	85	174	94	88	182	843	723	1,566			
29	1,112,607	{ Taluqs (R. C.)	...	...	1,112,607	60	46	106	51	39	90	66	63	119	69	61	130	79	64	143	663	648	1,211			
30	87,801	Total ... { Municipal Towns.	...	...	87,801	18	21	39	17	16	33	20	16	36	20	24	44	15	24	39	180	175	355			
31	1,978,731	Tanjore District	953,968	1,019,763	1,973,731	111	78	189	118	88	206	107	83	190	117	98	215	106	80	186	1,173	903	2,076			
32	1,789,719	{ Taluqs (R. C.)	866,492	923,227	1,789,719	89	50	139	85	66	151	83	53	136	89	68	157	81	58	139	876	607	1,483			
33	184,012	Total ... { Municipal Towns.	87,476	96,536	184,012	22	28	50	33	22	55	24	30	54	28	30	58	25	22	47	297	296	593			

84	2,266,615	Medura District	1,112,066	1,154,549	2,266,615	111	98	204	148	115	253	185	117	252	172	140	312	92	77	169	110	96	205	1,444	1,200	2,644
85	1,263,379	Talags (R. C.)	623,731	639,648	1,263,379	62	50	102	60	59	119	68	65	128	95	57	152	86	75	161	106	96	192	743	651	1,394
86	64,862	Municipal Towns.	32,083	32,083	64,862	8	...	8	8	6	8	7	2	9	2	7	9	6	2	8	4	9	13	680	53	1,124
87	938,384	Zemindaries	455,571	482,813	938,384	51	43	94	80	51	131	65	50	115	75	76	151	...	...	...	...	...	...	496	1,126	...
38	1,693,959	Tinnevely District	836,515	857,444	1,693,959	203	165	368	217	168	385	233	183	416	246	245	491	288	247	535	344	352	686	2,967	2,633	5,600
39	1,644,405	Talags (R. C.)	811,836	832,569	1,644,405	172	149	321	198	141	339	193	162	355	231	211	432	265	231	487	304	307	611	2,651	2,319	4,970
40	49,554	Municipal Towns.	24,679	24,675	49,554	31	16	47	19	27	45	40	21	61	25	34	59	22	26	48	40	45	85	316	314	630
41	959,640	Kurnool District	467,640	446,792	914,432	27	29	56	29	24	53	25	27	52	39	27	65	22	16	38	17	11	28	279	224	503
42	881,558	Talags (R. C.)	451,488	430,070	881,558	20	19	39	18	17	35	13	11	24	19	13	32	14	4	18	8	4	12	167	113	280
43	32,874	Municipal Towns.	16,152	16,722	32,874	7	10	17	11	7	18	12	16	28	19	14	33	8	12	20	9	7	16	112	111	228
44	45,206	Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
45	1,351,194	Cuddapah District	693,400	657,794	1,351,194	48	26	74	46	40	86	43	30	73	40	37	77	34	31	65	43	26	69	426	314	740
46	1,334,919	Talags (R. C.)	685,071	649,848	1,334,919	48	26	74	46	39	84	43	29	72	39	36	75	34	30	64	43	26	68	433	306	729
47	16,275	Municipal Towns.	8,329	7,946	1,625	...	...	...	1	1	2	...	1	1	1	1	2	...	...	1	...	1	1	3	8	11
48	1,668,006	Bellary District	860,173	807,833	1,668,006	124	104	228	116	97	213	114	129	243	108	113	221	105	101	206	85	83	168	1,181	1,083	2,264
49	1,566,873	Talags (R. C.)	807,871	759,002	1,566,873	120	100	220	111	93	204	104	117	221	99	103	202	104	94	198	79	71	150	1,120	1,007	2,127
50	86,187	Municipal Towns.	44,768	41,369	86,187	4	4	8	4	4	8	10	12	22	9	10	19	1	7	8	6	12	18	57	72	129
51	14,996	Zemindaries	7,594	7,462	14,996	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	4	4	8
52	2,015,278	North Arcot District	1,020,678	994,600	2,015,278	130	118	248	89	62	151	68	63	131	78	72	150	79	89	168	100	80	180	998	954	1,952
53	1,801,147	Talags (R. C.)	658,401	642,746	1,801,147	62	57	119	68	40	108	35	42	77	40	39	79	54	52	106	72	49	121	662	575	1,287
54	50,125	Municipal Towns.	26,155	26,155	50,125	1	4	5	1	1	2	2	...	2	2	2	5	...	...	...	1	1	2	14	15	29
55	664,066	Zemindaries	338,370	325,699	664,066	67	57	124	20	21	41	31	21	52	36	30	66	25	37	62	27	30	57	322	364	686
56	1,966,095	Salem District	975,502	991,493	1,966,095	118	79	197	90	90	180	150	102	252	133	120	253	154	124	278	117	77	194	1,223	998	2,221
57	1,916,983	Talags (R. C.)	950,560	966,453	1,916,983	113	76	189	82	81	168	142	99	241	129	112	241	147	122	269	109	73	182	1,169	955	2,124
58	50,012	Municipal Towns.	24,942	25,070	50,012	5	3	8	8	9	17	8	8	11	4	8	12	7	2	9	8	4	12	54	43	97
59	1,763,274	Coimbatore District	874,975	888,299	1,763,274	145	123	268	147	127	274	172	145	317	171	163	334	152	94	246	161	110	271	1,565	1,252	2,817
60	1,717,763	Talags (R. C.)	...	...	1,717,763	144	121	265	143	125	263	167	140	307	169	156	325	150	91	241	159	107	266	1,532	1,223	2,755
61	45,511	Municipal Towns.	...	...	45,511	1	2	3	4	2	6	5	5	10	2	7	9	2	8	5	5	2	5	33	29	62
62	49,501	Neelgherry District	27,192	22,309	49,501	4	5	9	4	4	8	6	7	13	2	3	5	2	4	6	6	5	11	51	53	104
63	36,461	Talags (R. C.)	20,269	16,192	36,461	2	2	4	2	2	4	4	2	6	...	1	1	...	1	1	1	1	2	26	18	44
64	13,040	Municipal Towns.	6,923	6,117	13,040	2	3	5	2	2	4	2	5	7	2	2	4	2	3	5	5	4	9	25	35	60
65	918,362	South Canara District	459,729	458,638	918,362	127	103	230	117	97	214	116	76	192	117	95	212	98	91	184	119	94	218	1,327	1,093	2,420
66	888,650	Talags (R. C.)	444,541	444,109	888,650	118	96	214	111	91	202	104	75	179	116	92	208	90	86	176	112	93	205	1,266	1,045	2,311
67	29,712	Municipal Towns.	15,188	14,524	29,712	9	7	16	6	6	12	12	1	13	1	3	4	3	5	8	7	1	8	61	48	109
68	1,134,899	Malabar District	1,126,851	1,126,851	1,134,899	181	165	347	194	200	394	197	149	346	186	122	258	145	124	269	132	118	260	1,763	1,550	3,313
69	2,138,933	Talags (R. C.)	1,073,713	1,065,220	2,138,933	167	160	317	184	185	369	180	136	316	126	115	241	133	118	261	129	114	243	1,663	1,456	3,119
70	123,317	Municipal Towns.	61,176	61,141	123,317	14	16	30	10	15	25	17	13	30	10	7	17	12	6	18	8	4	7	100	94	194
30,835,577	Total Madras Presidency	...	15,221,079	15,066,763	30,287,842	1736	1472	3,207	1741	1507	3,248	1813	1477	3,290	1828	1638	3,466	1737	1528	3,395	1892	1587	3,479	19,796	18,666	36,393

X.
Comparative Statement of Births, Deaths, and Marriages registered in the Rural Circles and Towns of the Madras Presidency during the Year 1873.

1	2	3	4			5			6		7	8	9	10
No.	Population according to Census of 1871	Names of Districts.	Population for which Returns were received.			Number of Births registered.			Ratio of Births per 1,000 of Population.		Excess of Births over Deaths per 1,000 of Population.	Excess of Deaths per 1,000 of Population.	Number of Marriages registered.	Ratio of Marriages per 1,000 of Population.
			Males.	Females.	T total.	Males.	Females.	Total.	Males.	Females.				
1	1,388,976	Ganjam District ...	631,013	571,180	1,202,193	8,569	7,921	16,490	13.5	13.8	1.9	...	...	...
2	533,848	{ Taluqs (R. C.)	265,508	268,335	533,843	3,845	3,461	7,306	14.4	12.8	2.2	...	...	...
3	37,257	{ Municipal Towns	18,074	19,183	37,257	331	330	661	18.3	16.6	...	1.5	...	...
4	817,817	{ Zemindaries ...	347,431	283,662	631,093	4,393	4,110	8,503	12.6	14.5	1.8	...	...	...
5	1,844,711	Vizagapatam District ...	780,149	748,818	1,528,967	8,037	7,463	15,500	10.3	9.9	...	1.9	...	...
6	937,045	{ Taluqs (R. C.)	394,654	377,467	772,121	8,815	3,610	7,425	9.6	9.5	...	2.1	...	...
7	69,916	{ Municipal Towns	34,370	35,546	69,916	985	852	1,837	28.6	23.9	0.1	...	...	...
8	837,750	{ Zemindaries ...	351,125	335,805	686,930	3,237	3,001	6,238	9.2	8.9	...	1.9	...	...
9	1,592,939	Godavery District	803,603	789,336	1,592,939	12,310	11,794	24,104	15.3	14.9	...	4.5	...	...
10	1,326,047	{ Taluqs (R. C.)	637,891	638,156	1,276,047	10,216	9,829	20,045	15.2	14.9	...	4.5	...	...
11	68,064	{ Municipal Towns	33,338	29,726	63,064	784	719	1,503	23.5	24.1	...	2.6	...	...
12	203,828	{ Zemindaries ...	102,374	101,454	203,828	1,310	1,216	2,526	12.7	12.2	...	4.6	...	...
13	1,452,374	Kistna District ...	737,495	714,879	1,452,374	12,649	12,388	25,037	17.1	17.3	...	0.9	...	...
14	1,235,026	{ Taluqs (R. C.)	628,046	606,980	1,235,026	10,895	10,686	21,581	17.3	17.5	...	0.4	...	...
15	54,221	{ Municipal Towns	26,342	27,879	54,221	618	586	1,204	23.4	21.01	2.0	...	...	...
16	163,127	{ Zemindaries ...	83,107	80,020	163,127	1,136	1,136	2,272	13.6	14.1	...	5.7	...	...
17	1,376,811	Nellore District ...	707,392	669,419	1,376,811	9,785	9,160	18,945	13.8	13.6	...	0.3	...	...
18	1,107,697	{ Taluqs (R. C.)	568,392	539,305	1,107,697	6,956	6,492	11,448	10.4	10.1	...	0.9	...	...
19	29,922	{ Municipal Towns	14,879	29,922	29,922	369	296	665	24.8	19.6	7.2	...	...	...
20	239,192	{ Zemindaries ...	124,121	115,071	239,192	3,460	3,372	6,832	27.8	29.3	1.4	...	...	...
21	397,552	Madras Town (R. C.) ...	194,676	202,876	397,552	5,036	4,346	9,382	25.8	21.4	...	13.2	...	...
22	938,184	Chingleput District	475,968	462,216	938,184	10,171	9,710	19,881	21.3	21.00	1.4	...	...	...
23	900,857	{ Taluqs (R. C.)	457,716	443,141	900,857	9,775	9,344	19,119	21.3	21.08	1.6	...	...	...
24	37,327	{ Municipal Towns	18,252	19,075	37,327	396	366	762	21.6	19.1	1.9	...	...	...
25	1,755,817	South Arcot District	885,922	869,895	1,755,817	13,027	12,149	25,176	14.7	13.9	0.5	...	...	...
26	1,715,527	{ Taluqs (R. C.)	866,417	849,110	1,715,527	12,521	11,689	24,210	14.4	13.7	0.4	...	...	...
27	40,290	{ Municipal Towns	19,505	20,785	40,290	506	460	966	25.9	22.1	7.2	...	...	...
28	1,200,408	Trichinopoly District	588,184	612,274	1,200,408	12,982	12,268	25,250	22.04	20.03	2.8	...	...	...
29	1,112,607	{ Taluqs (R. C.)	...	...	1,112,607	11,496	10,828	22,324	...	...	2.1	...	...	...
30	87,801	{ Municipal Towns	...	...	87,801	1,486	1,440	2,926	...	...	11.2	...	...	...

not available.

31	1,978,781	953,988	1,019,768	1,978,781	27,966	26,276	54,244	29-3	25-7	27-4	5-0	...
32	1,789,719	866,492	928,227	1,789,719	26,172	28,624	48,786	29-06	25-5	27-2	5-4	...
33	184,012	87,476	96,536	184,012	2,794	2,654	5,448	31-9	27-4	29-6	1-4	...
34	2,268,615	1,112,066	1,154,549	2,268,615	14,328	13,596	27,919	12-8	11-7	12-3	2-9	...
35	1,263,379	623,731	639,648	1,263,379	9,040	8,504	17,544	14-4	13-2	13-8	3-1	...
36	64,852	32,784	32,088	64,852	947	881	1,828	28-9	27-4	28-1	5-6	...
37	888,884	466,571	482,813	888,884	4,886	4,211	9,647	9-5	8-7	9-1	2-4	...
38	1,693,959	836,515	857,444	1,693,959	13,986	12,894	26,880	16-7	15-08	15-8	1-1	...
39	1,644,405	811,886	832,569	1,644,405	13,028	11,950	24,978	16-04	14-3	15-1	0-9	...
40	49,554	24,879	24,875	49,554	968	944	1,902	38-8	37-9	38-3	7-2	...
41	959,840	467,840	448,792	914,432	8,241	8,199	16,440	17-6	18-3	17-9	1-2	...
42	881,568	451,488	430,070	881,568	7,776	7,784	15,560	17-2	18-09	17-6	0-8	...
43	32,874	16,152	16,722	32,874	465	415	880	28-7	24-8	26-7	...	8-9
44	45,208	...	...	...	...	...	...	...	...	...	...	...
45	1,351,194	688,400	657,794	1,351,194	10,970	10,808	21,778	15-8	16-4	16-1	1-4	...
46	1,324,919	685,071	649,848	1,324,919	10,696	10,524	21,220	15-6	16-1	15-8	1-4	...
47	16,275	8,339	7,946	16,275	274	284	558	32-8	35-7	34-2	...	2-7
48	1,668,006	890,173	807,833	1,668,006	17,205	16,708	33,911	20-00	20-6	20-3	2-5	...
49	1,568,873	807,871	759,002	1,568,873	15,778	15,849	31,122	19-1	20-2	19-8	2-2	...
50	86,137	44,768	41,869	86,137	1,273	1,194	2,467	28-4	28-8	28-6	8-2	...
51	14,986	7,534	7,463	14,986	159	163	322	21-1	21-8	21-4	0-2	...
52	2,015,278	1,020,878	994,800	2,015,278	28,019	21,872	44,691	22-5	21-7	22-1	...	0-2
53	1,301,147	658,401	642,746	1,301,147	16,143	14,158	29,301	22-9	22-02	22-5	1-2	...
54	50,125	23,970	23,155	50,125	573	508	1,081	23-9	19-4	21-5	...	1-4
55	684,006	338,370	326,689	684,006	7,303	7,006	14,309	21-5	21-5	21-5	2-0	...
56	1,966,995	975,503	891,433	1,966,995	23,796	23,169	45,905	24-3	22-3	23-3	1-6	...
57	1,916,983	950,560	866,433	1,916,983	23,956	21,423	44,379	24-1	22-1	23-1	1-8	...
58	50,013	24,943	26,070	50,013	780	746	1,526	31-3	29-7	30-5	5-43	...
59	1,763,274	874,975	888,299	1,763,274	11,745	10,718	22,463	13-08	12-06	12-7	...	0-8
60	1,717,763	...	...	1,717,763	11,352	10,310	21,662	...	...	12-6	...	0-9
61	45,511	...	...	45,511	398	408	801	...	...	17-6	4-3	...
62	49,501	27,192	22,809	49,501	565	476	1,041	20-7	21-3	21-02	3-32	...
63	36,461	20,369	16,192	36,461	281	238	519	13-8	14-6	14-2	0-8	...
64	13,040	6,923	6,117	13,040	284	238	522	41-02	38-8	40-03	10-23	...
65	918,362	459,729	453,833	918,362	9,504	8,766	18,270	20-6	19-1	19-8	5-4	...
66	888,650	444,541	444,109	888,650	9,148	8,472	17,620	20-5	19-07	19-8	5-6	...
67	29,712	15,188	14,524	29,712	356	294	650	23-4	20-2	21-8	1-5	...
68	2,261,250	1,134,889	1,126,361	2,261,250	23,327	21,489	44,816	20-7	19-07	19-8	4-0	...
69	2,138,933	1,078,713	1,065,220	2,138,933	21,217	19,631	40,848	19-5	18-4	19-09	4-19	...
70	122,317	61,176	61,141	122,317	2,110	1,858	3,968	34-4	30-3	32-4	0-9	...
71	30,835,577	15,221,079	15,066,763	30,287,842	277,153	260,970	538,123	18-2	17-3	17-7	0-8	...

